AN EVALUATION OF THE EFFECTIVENESS OF AN HIV/AIDS PEER EDUCATION INTERVENTION PROGRAMME

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PLAGIARISM DECLARATION

I declare that this thesis is my own work and has not been previously submitted for any degree or examination at any other university. I have used the APA convention for citation and referencing. Each contribution to, and quotation in this thesis, from the work(s) of other people has been contributed, and has been cited and referenced.

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ABSTRACT

This thesis investigated the effectiveness of an HIV/AIDS peer education intervention programme based in four secondary schools in the Western Cape region. Self-administered questionnaires were used on an experimental group (peer educators) and a control group in a pre- and post-test to investigate changes in learning's around HIV/AIDS and sexuality over the years programme. While results indicated limited changes in knowledge, attitudes and behaviours that could be attributed to the programmes intervention, there were several interesting trends highlighted in this target group around testing, disclosure and stigma.

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TABLE OF CONTENTS

LIST OF FIGURES AND TABLES

FIGURES

TABLES

CHAPTER ONE - INTRODUCTION

The human immunodeficiency virus (HIV) and the acquired immunodeficiency syndrome (AIDS) are currently the most devastating health conditions affecting millions throughout the world. It is estimated that approximately sixty million people have been infected since the beginning of the epidemic, and in 2001 alone an estimated five million people acquired the HIV infection in South Africa (UNAIDS/WHO, 2001). Sub-Saharan Africa, the poorest and most undeveloped region of the world, faces the highest rate of HIV infections (Eaton, Flisher & Aarø, 2003).

Epidemiological studies have shown that the peak incidence of HIV/AIDS occurs in young people aged 15-24 years (Pettifor et al., 2004). Levels of heterosexually transmitted HIV infection are high amongst South African youth, with one survey reporting levels of 18.9% amongst 17–20 year olds and 43.1% amongst 21–25 year olds (MacPhail & Campbell, 2001). South Africa has the third highest prevalence of HIV/AIDS infection rate for young people in the world (UNAIDS/WHO, 2001).

Forty-five percent of the South African population (sixteen million) is under twenty years old (LoveLife, 2002, as cited in Scurry, 2003). Most new HIV infections occur in people between the ages of 15 and 20 years (Government of South Africa, 2000, as cited in Stadler & Hlongwa, 2002; Scurry, 2003). A report based on research done by four nongovernmental organisations predicted that 25% of South African women and 5% of men aged 15-19 would have HIV by 2010 ("HIV/AIDS…", 2001). In addition this report predicted that South Africa would have one million AIDS orphans under the age of 15 before 2005 and 2.5 million by 2010.

In 2000, the then minister of education in South Africa, Kadar Asmal, identified HIV/AIDS as a priority issue, arguing that it is causing the education system to experience its worst crisis (Campbell & Foulis, 2002). Teachers are dying or are too sick to teach, and annually there are more children who are losing parents and supports that allow them to attend school ("Education and HIV/AIDS", 2002).

Against this background of the growing HIV epidemic in South Africa, it has increasingly been argued that preventative interventions may be most effective if directed at young people below the age of 16 years (MacPhail & Campbell, 2001). Reductions in the rate of HIV infection among teenagers would lead to a substantial slowing of the epidemic while a failure to affect the rate of infection among this age group would sustain an epidemic of devastating proportions (Stadler & Hlongwa, 2002).

As HIV/AIDS is particularly impacting the youth of South Africa, it is impacting the future workforce and economically active population of the country. It would therefore be prudent for organisations to be aware of strategies targeting this population. It is these community networks that can provide the contexts for the diffusion of health-related information (Veenstra, 2000, as cited in Gregson, Terceira, Mushati, Nyamukapa, & Campbell, 2004). Social capital is needed for the successful implementation of peer education in schools and this refers to the link between communities and representatives of mainstream economic and political institutions (Campbell & Foulis, 2002). It has been argued that through the assistance of business, a measurable difference can be made to the epidemic due to the skills and resources that organisations have (Bloom & Rosenfield, 2000). Campbell and Foulis argue that the problem of HIV/AIDS is too complex to be addressed by any single community, especially ones such as youth; they therefore advocate that the most effective response is one that is lead by partnerships with grassroots communities, organisations and government agencies and where possible it is important for appropriate private sector and donor agencies at local, national and international levels to be involved.

Emphasis has been placed on the need for contextual interventions, including initiatives to promote gender equity in schools, to promote conflict resolution, develop self-esteem, build democratic school culture and secure schools against violence (Campbell & Foulis, 2002). HIV trends in teenagers are considered by government to be a good indicator for positive behavioural change (HIV Survey, 2002). Education has an important preventative impact, equipping children to make healthy decisions regarding their lives and futures and education is also fundamental to the empowerment of females ("Education and HIV/AIDS", 2002).

In the absence of an effective HIV vaccine, HIV prevention programmes have relied largely on campaigns to raise public knowledge and awareness about HIV risks and prevention methods based on the premise that an informed person will take appropriate steps to change behaviours to reduce exposure and possible infection (Stadler & Hlongwa, 2002). Education and skill development strategies have been identified as necessary approaches to prevent HIV transmission among young people (Schuster, Bell, Berry & Kanouse, 1998, as cited in Perez & Dabis, 2003). In addition evidence has emerged suggesting that communities and individuals with greater school education may be better placed to avoid HIV infection (Kilian, et al., 1999; Fylkesnes et al., 2001; Hargreaves & Glynn, 2000, as cited in Gregson et al., 2004).

Skills-based health education is important as information about sex and HIV is insufficient by itself to bring about low-risk behaviours, but must be linked with the development of interpersonal and other skills, such as critical and creative thinking, decision-making, and self-awareness, as well as with the development of the knowledge, attitudes, and values needed to make sound health-related decisions ("Education and HIV/AIDS", 2002).

Schools are important intervention sites for HIV prevention as they provide an optimal opportunity to reach numerous young people and are important vehicles for disseminating HIV/AIDS related information in the surrounding community (Perez & Dabis, 2003). Schools provide convenient settings for meetings, resources for group activities, and training in organisational skills (Gregson et al., 2004). A national survey of 15-24 year olds (n=11 904) cited school as the most common source of HIV knowledge (Pettifor et al., 2004).

Research has advocated that the most important aspect of slowing down the spread of STDs' and HIV infection would be to alter the broader social and material conditions which encourage high-risk sexual practices (Zwi & Bachmayer, 1990, as cited in Campbell, 1997). However, such changes involve on-going long-term struggles and given the lack of HIV/AIDS vaccines, as well as the speed at which the epidemic is progressing in South Africa, and the difficulty in implementing effective prevention programmes based on promoting safer sex and/or providing STD treatments,

additional short-term strategies are required to deal with HIV, and the challenge for HIV educators remains a substantial one (Campbell, 1997; Rain-Taljaard et al., 2003).

Sexual behaviour has to change before HIV/AIDS can be curbed and prevention occurs and there is substantial evidence internationally that demonstrates that the best time to positively impact adolescent behaviour is prior to the onset of sexual activity (Stadler & Hlongwa, 2002). Research has shown that education impacts behaviour most strongly among the youth and the suggested reason for this is that youth do not have to then alter high risk behaviour, but instead can develop good health behaviours as part of their growth ("Education and HIV/AIDS", 2002). A survey in one of South Africa's townships indicated that HIV infection was almost non-existent in the 13–16 year age group, followed by a sharp increase in the 16–18 year age group with the peak infection rates for the community as a whole being experienced by the 21–25 year age group (Williams, Campbell, & MacPhail, 1999). This therefore indicates the advantage of targeting youth younger than sixteen for interventions.

Understanding the influences on sexual behaviour and the mechanics of sexual behaviour change is limited, particularly in the southern African context (MacPhail & Campbell, 2001). There are various prevention programmes that have been implemented in South Africa, including: mass media awareness campaigns, distribution of condoms and other protection measures, voluntary counselling and testing (VCT), life-skills programmes in schools, sexually transmitted illnesses (STI's) treatment, and care and support (Stadler & Hlongwa, 2002). Many of these strategies have been developed in order to promote awareness of HIV risk, facilitate open discussion about HIV and other STI's, as well as establish group norms in support of safer sex behaviour (Pearlman, Camberg, Wallace, Symons, & Finison, 2002). Peer education is a strategy for educating young people about HIV/AIDS prevention (Hope, 2003); however the peer education model is in need of more rigorous evaluation (Kim et al, 1997, as cited in Pearlman et al.). This study therefore investigates the effectiveness of peer education as a strategy for targeting HIV/AIDS in a South African community. The study focuses on OIL, a non-profit community development organisation aiming to transform communities in South Africa using the peer education strategy. Peer education, its theoretical underpinnings and OIL will now be discussed.

CHAPTER TWO - LITERATURE REVIEW

PEER EDUCATION

Academic and student affairs leaders have long acknowledged that much of what students learn takes place in co-curricular and extracurricular settings that are dominated by their peers (Hunter, 2004). Peer education stems from the belief that well-liked and respected peers may be able to encourage others towards behaviours that promote HIV prevention rather than the high-risk behaviours usually associated with peer norms (Serovich & Greene, 1997, as cited in MacPhail & Campbell, 2001). Peer education can therefore be a very effective approach to HIV/AIDS prevention, as well as a way of empowering people of all ages (Hope, 2003).

Peer education programs have historically been utilised in school and community settings to address a range of health issues such as HIV/AIDS, drug and alcohol abuse, and youth violence (Devillya, Sorbellob, Ecclestonb, & Wardd, 2004). Peer education has been used in many and varied target areas including campaigns against smoking, drug and alcohol abuse, spousal violence, and teenage pregnancy, but it was in the area of HIV/AIDS and other STI's prevention that the use of peer education grew most rapidly (Hope, 2003). The foundation of the peer-to-peer education strategy has been used in higher education for decades as campuses used more experienced students to assist newer students (Hunter, 2004). Research has shown that peer educators have been used with effective results when addressing current campus concerns as diverse as diffusion of information about AIDS, improved cross-cultural communication, and treatment of eating disorders (Hunter).

Fitzgerald et al. (1999) found significant changes in knowledge, attitudes and intentions regarding HIV risk activities and marginally significant changes in risk behaviours in their study and concluded that it is possible to successfully adapt Western HIV prevention programmes into other cultural settings and that a single intervention approach seems to be effective in short-term follow up with both genders. Peer education is an increasingly favoured strategy in African adolescent reproductive health programs and is perceived as being effective and inexpensive, which is the key recommendation for successful youth intervention and involvement (Brieger, Delano, Lane, Oladepo & Oyediran, 2001).

Peer Education Definitions

Hope (2003) described peer education as an approach where a minority of peer representatives from a specific group or population are actively involved in informing and influencing the majority. Peer education involves young people who are trained in factual knowledge about HIV and participatory educational techniques, such as dramas and role plays; and ideally, should be given full control of setting up and running peer educational meetings in formal and informal settings (Campbell & Foulis, 2002). OIL (2003) has outlined peer education as a process where trained supervisors assist a group of suitable people to educate their peers; informally role-model healthy behaviour; recognise people in need of additional help and refer them for assistance; as well as campaign for resources and services for themselves and their peers.

Rationale for Peer Education

Research has shown that a good basic education ranks among the most effective, and cost-effective means of HIV prevention ("Education and HIV/AIDS", 2002). Research in Europe and America has suggested that teenagers are more likely to practice safe sex if they have opportunities to communicate openly about sex, with sexual partners, peers and parents or other significant adults (Aggleton & Campbell, 2000).

Research has demonstrated the following with respect to peer education ("Education and HIV/AIDS", 2002):

- *It has been proven to provide protection against HIV infection.* It has an important preventive impact as it can equip children and youth to make healthy decisions concerning their own lives, bring about long-term healthy behaviours, and give people the opportunity for economic independence and hope.
- *It is among the most powerful tools for reducing girls' vulnerability.* Education can go far in slowing and reversing the spread of HIV by contributing to female economic independence, delayed marriage, family planning, and work outside the home.

- *It offers a ready-made infrastructure for delivering HIV/AIDS prevention efforts* to large numbers of the uninfected population, schoolchildren, as well as youth, who in many countries are the age group most at risk.
- *It is highly cost-effective as a prevention mechanism,* because the school system brings together students, teachers, parents, and the community, and preventing AIDS through education avoids the major AIDS-related costs of health care and additional education supply.

Hope's (2003) study on peer education in Botswana disclosed that 78% of participants found that their peer education programme made them more sensitive to the plight of those with HIV/AIDS. Seventy-six percent of participants said that the peer education programme had led to a reduction in the number of their sexual partners. Sixty-seven percent of the female participants and seventy-six percent of male participants claimed that the peer education programme had led to a positive change in their desire to use condoms during sexual intercourse.

These results were supported by the study by Okonofua et al. (2003) in Nigeria to investigate the impact of peer education to improve treatment seeking behaviour and prevention of STI's among youths. The study observed that youths enrolled in the intervention schools, compared to control schools, reported statistically significant improvements in their knowledge of STI's, condom use, partner awareness that the youth had an STI, and STI treatment-seeking behaviour. The study also found significantly reduced reported prevalence of STI symptoms in the time following the intervention, when intervention schools were compared to the control group schools. In particular peer education and a focus on youth has been outlined as a powerful means to influence youth; peer education by respected students or other youth of the same age can help develop healthy behaviours and practices ("Education and HIV/AIDS", 2002).

The vision of peer education is the provision of an intervention to attain levels of community integration, context appropriateness and affordability, which is not achievable in more formal or didactic educational settings (Varga, Cebekhula, & Beksinksa, 1999, as cited in James, 2002).

Nwayo and Xaba (2002, as cited in Campbell & Foulis, 2002) argued from their South African study the importance of including people with HIV/AIDS in the training of peer educators and programme implementation.

Peer education strategies aim to facilitate the altering of group identities, allowing the challenging of traditional norms, particularly those that influence patriarchal and violent approaches to sexual practice (Horizons, 1999, as cited in James, 2002). However, successful peer education programmes aim for more than the renegotiation of identities, and the development of empowered and critically conscious youth peer-groups, they also need to contribute to the development of health-enabling community contexts (Tawil, Verster & O'Reilly, 1995, as cited in Campbell & Foulis, 2002). This was shown in a study done in Johannesburg on peer educators in township schools, in which Campbell and Foulis concluded that it is not enough to provide young people with HIV-related information and behavioural skills, programmes need to aim to provide social and community contexts that enable and support young people to act on this information and to put these behaviours into place.

History of peer education

Since the 1994 elections of a democratic government, attempts have been made to reformulate the education curriculum to make it more socially and culturally relevant and at the core of this has been outcomes based education through the development of 'Curriculum 2005' (Campbell & MacPhail, 2002). This curriculum emphasises learner participation, activity-based education, flexibility and critical thinking.

Early HIV intervention prevention research focused on the individual level of analysis, usually on the knowledge, attitudes and behaviours (KAB) conceptual frameworks (Campbell & Foulis, 2002). These strategies assume that HIV/AIDS-related knowledge and attitudes play an important role in shaping people's sexual behaviour and the KAB type frameworks underpinned the first generation of HIV prevention interventions which sought to increase knowledge and change attitudes through traditional didactic information-based health education (Campbell & Foulis). However, the didactic approaches had limited success in promoting behaviour change and it is now generally accepted that knowledge and attitudes are very weak determinants of behaviour (Joffe, 1996, as cited in Campbell & Foulis).

A study done by Perez and Dabis (2003) indicated a positive effect on knowledge and attitudes related to HIV/AIDS in all three cities studied when they evaluated a school-based peer education programme in three cities of Columbia. Findings from a combination of qualitative and quantitative methods suggest that HIV/AIDS prevention programmes can be rapidly implemented with high coverage through trained teachers and peer educators.

According to Aggleton and Campbell (2000), work on knowledge, skills and attitudes alone is considered insufficient to promote sexual health and it has become well documented that societal factors such as power relationships and social inequalities render some groups more systematically vulnerable to STIs' than others (Aggleton & Campbell, 2000). It was argued that peer education strategies needed to provide people with the behavioural skills to adopt healthier behaviours, and to increase people's confidence in their ability to adopt healthier behaviours, in addition to changing knowledge and attitudes (Campbell & Foulis, 2002). Therefore the second series of HIV prevention programmes became popular, the self-empowered approaches. These strategies taught people behavioural skills, such as how to put on condoms and how to negotiate condom use with a reluctant partner and aimed to develop people's confidence through strategies such as assertiveness training courses (Campbell & Foulis). Although these strategies enjoyed relative success when applied in organised, strong identity groups in affluent countries, they have proven less successful in less cohesive or organised groups, or in low-income countries (Campbell & Foulis).

This lead to the third type of intervention, peer education, based on the assumption that peers are the most important influence on young people's sexual behaviour, and that they are most likely to change their behaviour if they see liked and trusted peers changing theirs (Dube & Wilson, 1999, as cited in Campbell & Foulis, 2002).

Issues in peer education

The following limitations were highlighted in Campbell and MacPhail's (2002) study on peer education in township schools in Johannesburg. These findings are supported by other research done in a similar capacity and are outlined below.

The limitation of using didactic methods for teaching life skills

Although Curriculum 2005 aimed to move teaching away from the more outdated didactic methods of teaching, studies have showed that through poor implementation of policies into schools and schools keeping to didactic methods of teaching, peer education has had limited progress (Campbell & MacPhail, 2002). James (2002) researched peer education in Durban as part of a large-scale study to assess, in the context of high HIV transmission, the effectiveness of young peoples' exposure to education about life skills in schools. Findings revealed that life skills teaching in the formal classroom setting were mostly absent in township schools where the risk of HIV infection was highest.

Preference for didactic methods

Campbell and MacPhail (2002) also found in their study that both teachers and the peer educators tended to remained in the didactic method of teaching despite training in more participatory methods. One of the reasons considered is that it is the process that most individuals who would be training were comfortable with using.

Biomedical versus social content of discussions

Pupils tended to give peers lessons in terms of biomedical discourse about sexual risks and focused on information about HIV and there was no focus on the social context of sexuality or of the way in which gender relations may serve as an obstacle to condom use (Campbell & MacPhail, 2002).

Ott, Evans, Halpern-Felsher and Eyre's (2003) qualitative study aimed to examine how adolescent peer educators understand HIV prevention messages and their role as peer educators in an HIV risk reduction programme. Through interviews, administered to peer educators, staff and pupils, it was found that pupils shared similar beliefs about HIV transmission and risk reduction. The study also found different but strong altruistic roles among staff and peer educators as well as a difference in HIV risk perception across the three groups. A better understanding of how peer educators process and communicate health education messages will help in the design, implementation and evaluation of successful HIV prevention programme for adolescents (Ott et al, 2003).

Gender dynamics amongst peer educators

Campbell and MacPhail's (2002) study showed the relations between the genders as serving as a microcosm of the gender relations believed to contribute to the likelihood of unsafe sexual behaviour, with the male peer helpers disregarding their female co-workers. It has been emphasised that youth-focused peer education materials are unlikely to have any impact if they do not specifically deal with gender (Campbell & Foulis, 2002). In a six-country study it was found that the disregard for the role of gender and sexuality impeded meaningful discussion about HIV between parents and children, teachers and students, and boyfriends and girlfriends and therefore encouraged the epidemic (Mannathoko, 2002, as cited in Campbell & Foulis).

Morrell, Unterhalter, Moletsane and Epstein (2001, as cited in Campbell & Foulis, 2002) in South Africa and Schatz and Dzvimbo (2001, as cited in Campbell & Foulis) in Zimbabwe outlined how failure to take account of the gendered nature of sexuality and sexual health undermines the likelihood that prevention messages will resonate with learners' personal experiences of sex.

From this study, Campbell and MacPhail (2002) concluded that peer education should ideally provide opportunities for young people to develop a critical conscience of how socially constructed norms of gender place their sexual health at risk as well as a belief in the possibility of alternative gender relations. Therefore consciousness forms the starting point for the collective renegotiation of young people's social and sexual identities and the empowerment to act on these. Further, Campbell and MacPhail concluded that there is a need for HIV prevention workers to give support to a number of long-term activities and that there was still much work needed to be done in developing school contexts for HIV prevention programmes. This study is focused on evaluating the effectiveness of the organisation, OIL, in providing these long-term activities in a school context. The next section outlines OIL's intervention programme and the problems the peer education programme aims to address.

OIL

OIL is a non-profit community development organisation that is aiming to transform communities. OIL stands for: take *O*wnership of your life, *I*nvest in your life, and *L*ubricate your life.

In 2001, OIL strategically selected a particular community within the Western Cape to pilot a best practice adolescent peer education model (in order to keep the school names confidential the name of this particular community has been omitted). This community consists of four diverse sub-communities that together represent a microcosm of South Africa as a whole (OIL, 2003). OIL has piloted their model through recruiting, training and supervising peer educators from the four high schools within this community and provides cross-cultural, value-based lifestyle training and media content through a sustainable adolescent peer-education model. These schools cover a cross-cultural group of young people from a range of socio-economic backgrounds. OIL's peer education model was selected by the Western Cape Education Department as a pilot study for sustainable adolescent peer education in the Western Cape (OIL, 2003).

The Clase Models for identifying schools were introduced by the former government during the Apartheid era in the context of rationalisation of educational resources (Naidoo, 1996). Even though these models are no longer in use it is nevertheless easier to understand the schools used in the present study by how they were formally classed. School A is considered an ex-Model C school and therefore is characterised as having a better infrastructure than many other schools in the Western Cape. There are a larger proportion of white students in this school than students of other races. School B would be considered an ex-Model D school and is located within the informal settlement in the community and there are high levels of poverty experienced here (OIL, 2004). School C has a high proportion of coloured students attending compared to students of other races and although is not located within the local informal settlement, would also be considered an ex-Model D school. School D would also be an ex-Model C school and has the highest integration of the different races.

OIL (2003) have stated that, while each school does have unique problems, the issues of gangsterism, unemployment, apathy, drug and alcohol abuse, school dropouts and stigma around HIVAIDS, high levels of pregnancies and STI's is prevalent throughout the community. In a study done in three urban areas in the United States, surveys were administered to 1172 adolescents between the ages of 12 and 17 years living in 15 low-income housing developments to investigate predictors of HIV risk behaviour (Sikkema et al., 2004). It was found that youth that live in conditions of impoverished, urban neighbourhoods are at risk for a wide range of social health problems, including HIV infection (Sikkema et al.). This is particularly relevant for this community, particularly for schools B and D.

Every social programme embodies a programme theory, a set of assumptions and expectations that constitute the logic or plan of the programme and provides the rationale for what the programme does and why its does it (Rossi, Freeman & Lipsey, 1999). In OIL the assumptions are well formulated and explicitly stated in that OIL advocates that peer education is the ideal tool in which to transform communities and believes that effective peer education has to play a leading role in taking South Africa forward, and outlines the following as unique advantages (OIL, 2003):

- Peers are better placed to be influential role models in the lives of their friends, than teachers or other adult professionals.
- Peer education multiplies the reach of the most effective adults.
- The peer educator team can appeal to diverse learners.

Problems the programme aims to address

A successful peer education programme should begin with a determination of the specific issues of a particular target group and the resources available to meet those needs to plan the most suitable intervention (Cowie & Wallace, 2000; Walker & Avis, 1999, as cited in Devillya et al., 2004). OIL (2003) state that their programme aims to provide a way that allows HIV negative teenagers to remain negative and to believe in a future, and for the nation's HIV positive teenagers to live longer, healthier and purpose-filled lives and, in turn, be able to help others.

OIL aims to see a continuing reduction in the following areas through the delivery of its programme:

- Sexual activity of adolescents
- Transmission of HIV/AIDS and Sexually Transmitted Infections (STI's)
- Teen pregnancies
- Drug and alcohol abuse
- Gangsterism
- School dropout rates
- HIV/AIDS stigma
- Apathy
- Racial division and inequality

OIL aims to see, through their programme, an increase in:

- Sexual abstinence
- HIV disclosures
- Cross cultural friendships and racial unity
- Community transformation
- School attendance and Grade 12 pass rates
- Tertiary education and employment
- Adolescent driven community upliftment initiatives
- Adolescent leadership
- Adolescents filled with vision and purpose

From the above, it can be seen that OIL's focus is on the five areas about which youth tend to be anxious. These five areas were identified in a study focusing on the social anxieties associated with HIV prevention among adolescents in Nigeria, Kenya, and Zimbabwe (Venier, Ross, & Akande, 1998, as cited in Betts et al., 2003). It was found that Kenyan students tended to be less anxious about condom interactions, refusal of risk, confiding in significant others, and contact with people with HIV/AIDS than students in the other countries and it was recommended from this study that intervention programs focus on the five areas about which adolescents tend to be anxious (condom interactions, refusal of risk, confiding in significant others, contact with people with HIV/AIDS, and general assertiveness).

OIL believes that the way to addressing these issues is through peer education. OIL peer educators are equipped with the role of being information providers, role-models, referral agents and helpers who are effective in promoting skills, creating a value based social norm and providing healthy alternatives amongst their peers (OIL, 2003). Through supervising the peer educators through this model, OIL aims for the following objectives to be progressively fulfilled:

- *Personal transformation* – peer educators experience personal change and make positive decisions with vision and purpose for their lives.
- *Group Transformation* – Personal transformation will lead to formal and informal contacts with their peers. Peer groups and school communities are influenced to make positive decisions with vision and purpose for their lives.
- *Community transformation* – Group transformation impacts on community social norms and these communities are influenced to embrace positive decision making with vision and purpose.

Therefore the programme rests on the assumption that community transformation will occur when the group is transformed, which will occur after the individual is transformed, which is aided by peer education. This research aims to investigate the first stage of this process by looking at how effective OIL is at aiding personal transformation.

OIL's Service Utilisation Plan

The Service Utilisation Plan is how the intended target population receives the intended amount of the intended intervention through interacting with the programme's service delivery system (Rossi et al., 1999). As depicted in Figure 2.1, OIL implements its adolescent peer education model through two training tracks (Year 1 and 2); with an ongoing community support programme to ensure that the roles of a peer educator are achieved. OIL has an additional year (Year 3) of advanced and flexible activities for learners still in the school system and these students fulfill the role of peer mentors for the Track 1 and 2 programmes (OIL, 2003). Training skills-development is interactive and includes diverse learning methods and structured coaching, counselling and supervision (OIL). Year 4 and 5

consists of peer educators that leave the school system and apply to join OIL, or a relating community-based organisation.

PILOT **BEST PRACTICE MODEL**

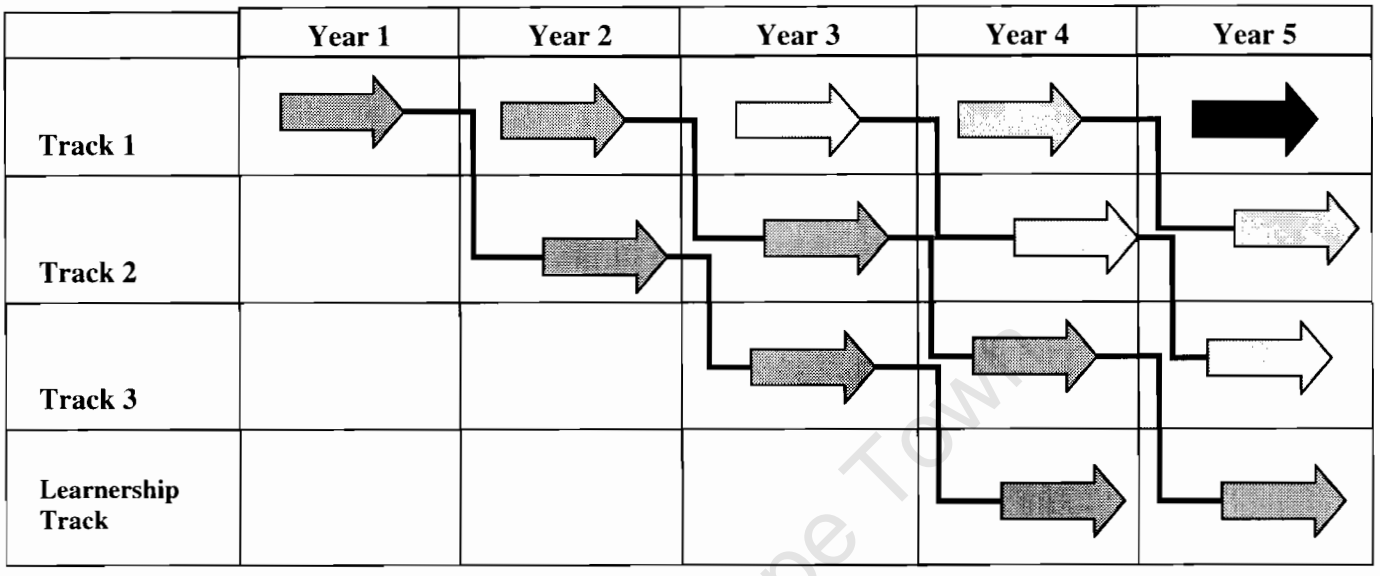

Figure 2.1 - OIL's Peer Education Model (OIL, 2003)

Track 1 is the first group of peer educators and consists of 10-15% of selected grades, ideally grade 10 (the grade selected depends on the school and the context) learners within the schools, elected by their peers and trained as trainee peer educators who represent their grade as a whole. The election of these students is voluntary and they have the option of declining being peer educators. Peer educators receive a minimum of 150 contact hours of training, supervision and support through a structured programme over the course of the school year, taking place both within and outside of the school context. The programme equips the peer educators to develop as individuals capable of fulfilling the expected clearly defined Track One roles (OIL, 2003).

The Track 1 curriculum includes HIV/AIDS, sexuality, and lifestyle modules and equips individuals as peer educators. The course is run with each school independently through a camp at the beginning of the year and during the year. During the year there are bimonthly meetings with the peer educators and Lube Lounges. Lube Lounges are community events where role models (celebrities and community and business leaders) are invited to share their stories with the peer

educators and the community (OIL, 2003). This research will focus on this stage of the programme. For more information regarding the following Tracks and community involvement please see Appendix A.

THEORETICAL FOUNDATION OF PEER EDUCATION

Several major theories of behaviour have been applied to understanding HIV-risk behaviour (Eaton et al, 2003).

Theory of Diffusion

Diffusion Theory or Diffusion of Innovation refers to the flow of social practices among people within some larger system (Strang & Meyer, 1993, as cited in Soule, 1997). Diffusion is a generalised phenomenon and has been studied from diverse perspectives such as economics, rural sociology, medical sociology, cultural anthropology, and marketing (Brown, 1981; Hagerstrand, 1967; as cited in Redmond, 2003). The Diffusion of Innovation model has been researched for almost a century; over widespread studies from agricultural techniques and birth control devices in rural sociology to contemporary studies of diffusion of health promotion and public education programmes (Ferrence, 2001).

Diffusion of Innovations is defined as "the process through which an innovation, defined as an idea perceived as new, spreads via certain communication channels over time among the members of a social system" (Rogers, 2004, p. 13). Rogers (1983, as cited in Ferrence, 2001) stated that innovations could be characterised by their relative advantage over alternative products or behaviours, their compatibility with existing values, their complexity and observability. This theory is a model of information dissemination and it aims to describe the processes involved in encouraging a community to adopt a new behaviour or a new product (Smith & DiClemente, 2000). Tarde (1903, as cited in Ferrence) argued in his Laws of Imitation that proximity led to imitation, and that imitation occurred through a filter process, where inferiors imitated superiors. Tarde (as cited in Ferrence) described an S-shaped or epidemic curve that increases slowly at first, then rises rapidly and then finally slows and levels off.

Authors of Diffusion Theory outline two types of channels along which innovations flow (Soule, 1997). The first is direct or relational channels, where information flows between actors through their direct network relations. The second channel is indirect or cultural linkages, where actors or groups are said to have ties because they belong to the same group or common society. It is thought that the higher the level of identification with a shared social or cultural category, the more extensive the transmission of an innovation (Soule).

According to Soule (1997) diffusion is difficult to model empirically. Conventional diffusion models have made two general assumptions about the population being studied. Firstly, they assume spatial homogeneity, meaning that each member of the population has the same probability of influencing and being influenced by other population members (Strang, 1992, as cited in Soule). Diffusion models also assume temporal homogeneity where the influence of the prior adoption of an innovation on potential adopters does not vary with the length of time since the adoption of the innovation (Strang, as cited in Soule). Strang and Tuma (1993, as cited in Soule) propose another assumption on the premise that these two assumptions are unrealistic: shifting the level of analysis to the individual actor rather than the population. Therefore the rate of adoption of an innovation by an actor is a function of the adoption rate of other, related actors.

One of the most important determinants of success of peer education according to diffusion theory is the degree of homophily (or similarity) between the change agents (peer educators) and the recipients (students) and the theory therefore maintains that the most effective communicators are properly trained popular opinion leaders from within the target community (Smith & DiClemente, 2000).

Oldenburg, Hardcastle and Kok (1997, as cited in Ferrence, 2001) stated that the aim of diffusion in the promotion of health and health education is to maximise the exposure and reach of innovations, strategies or programmes. Rogers (1983; 1995, as cited in Martin, Herie, Turner & Cunningham, 1998) identified five stages in the decision-making process by individuals that aided diffusion of concepts and attitudes. The first is *knowledge*, referring to awareness and basic understanding. The second

stage is *persuasion*, which is the process of forming an attitude toward the innovation. Third is *making the decision*, referring to the activities that lead to a choice to adopt or reject. Then putting the innovation into practice is the fourth stage called *implementation*. Fifth is *confirmation* where the individual seeks reinforcement for continuing to use the innovation. This model stresses the importance of giving special emphasis to ensuring that the intervention can be implemented successfully (Martin et al.).

Peer education programmes rely on diffusion processes to disseminate interventions to specific target groups using key individuals considered likely to influence other individuals' behaviours (Ferrence, 2001). Bell (1968, as cited in Redmond, 2003) regarded diffusion as the key engine of change in society. Diffusion Theory remains a unique model for describing patterns of change at many levels over variable periods of time, while incorporating other theories, such as Social Learning Theory and Communications Theory, to provide an understanding of the mechanisms at work (Ferrence).

Social Learning Theory

Peer education theory stems mainly from both Diffusion Theory and Social Learning Theory (Devillya et al., 2004; Elliot & Lambourn, 1999). Bandura's (1977) Social Learning Theory is based on the principle of peer group education. There are two bodies of literature around social identity that are associated with peer education strategies. Firstly, that health related behaviour is determined by collectively negotiated social identities (Stockdale, 1995, as cited in Campbell & MacPhail, 2002), which has lead to a shift away from information based health education towards a participatory approach within HIV prevention (Beeker, Guenther-Gray, & Raj, 1998, as cited in Campbell & MacPhail). The second view from literature is that social identity literature has provided a framework for understanding how gendered powered relations influence young people's sexuality (Campbell & MacPhail).

This theory holds that identities are constructed and reconstructed within a range of structural and symbolic constraints often placing limits on the extent to which people are able to construct images of themselves adequately reflecting their potentialities

and interests (Campbell & MacPhail, 2002). Therefore, ideally, peer education settings should provide a context within which a group of young people may come together to construct identities that challenge the ways in which traditional gender relations place their sexual health at risk (Campbell & Jovchelovitch, 2000, as cited in Campbell & MacPhail). According to Bandura (1986, as cited in Devillya, 2004), the closer the participants identify with the role-models of behaviour, the more likely they are to change their behaviour in a consistent manner. Adolescents are more likely to adopt a modeled behaviour if: it results in outcomes they value; they relate to a model who has admired status and is similar to them; and the behaviour needs have functional value in the adolescent's world (Bandura, 1971, as cited in Elliot & Lambourn, 1999).

Critical Consciousness Theory

Futile sexual health programmes have resulted from misperceptions in education policy about *why* youth engage in risky behaviour (Scurry, 2003). Too often policy makers conclude that they are simply ill informed. However, investigation and research into young people's social interactions, desired negotiations of sexual discourse, and general attitudes reveal that risky behaviour is actually a symptom of greater problem: a perceived lack of future (Scurry). Risky behaviour (sexual, substance, or violent) reflects a lack of futures-oriented thinking. Adolescents are generally concerned with immediate risks and immediate benefits rather than the future (Scurry). Between childhood and adulthood, they are part of neither group and are therefore particularly concerned with social acceptability and the opinions of their peers now (Lear, 1995, as cited in Scurry). This state of mind is intensified when the future is put in question by unrest, violence, or disease. In South Africa the majority of youth say that they are relatively happy at present, but fifty-five percent indicate that their opportunities for the future are either limited or nonexistent (LoveLife, 2001).

Lack of futures-oriented thinking is not new among adolescents, but it has serious implications for sexual behaviour in the context of HIV/AIDS (Scurry, 2003). According to Scurry, quality educator training, peer education, community-support,

and foundations in futures-oriented education could determine the success or failure of the programme.

A South African NGO called LoveLife outlined that, although the majority of youth in South Africa know what condoms are and how to use them, the majority of sexually active youth are not having protected sex, and it is therefore clear that knowledge has not led to behaviour change (LoveLife, 2001). Scurry's (2003) investigation into what influences youth behaviour revealed that a general lack of futures-oriented thinking has put young people at risk of infection. Programmes that offer overly simplified solutions to the problem of youth sexuality fail, but programmes that allow for the renegotiation of norms in a futures-oriented framework prove successful in changing behaviour. Scurry has advocated that the only approach that takes youth desires and life circumstances seriously and provides a forum for young people to set goals for themselves, make decisions about what they believe, and ultimately choose whether and when to engage in sexual activity are life skills programmes.

Therefore, if poverty, sexual domination, and other trials discourage youth from considering their long-term health in immediate decisions, life skills can counteract the trend with an encouraging environment for youth to envision and plan for their future (Scurry, 2003). There has been a lot of work done on the role of empowerment in shaping health-enhancing behaviour change (Rappaport, 1987, as cited in Campbell & MacPhail, 2002). This starts with the assumption that powerlessness or lack of control over one's destiny severely undermines the health of people in chronically marginalised or demanding situations (Walerstein, 1992, as cited in Campbell & MacPhail). The renegotiation of collective identities within peer education settings needs to take place alongside the development of the target grouping's confidence and ability to act on collective decisions in favour of health-enhancing behaviour (Campbell & MacPhail).

According to Bandura (1996, as cited in Campbell & MacPhail, 2002) disempowered people are less likely to feel that they can take control over their health, and are less likely to engage in health-enhancing behaviours. Critiques argue that psychological empowerment is indisputably linked to real political and economic empowerment and

unless participatory health promotion programmes are accompanied by real changes in the access that target audiences have to real symbolic power they are unlikely to succeed (Tawil et al., 1995, as cited in Campbell & MacPhail).

Empirical findings suggest that it is not enough to conceptualise 'empowerment' in terms of increasing young people's emotional or motivational confidence in their ability to protect their sexual health (Campbell & MacPhail, 2002). Empowerment also involves the development of intellectual understandings of the way in which social relations contribute to the transmission of HIV and undermine efforts to reduce HIV transmissions (Campbell & MacPhail). Freire's (1993, as cited in Campbell & MacPhail) conceptualisation of empowerment adds a more cognitive dimension that focuses on peoples' intellectual analyses of their circumstances. He has argued that an important precondition for positive behaviour change by marginalised social groups is the development of critical consciousness. Critical consciousness refers to the development of intellectual understandings of the way in which social conditions have fostered peoples' situations of disadvantage (Campbell & MacPhail).

The development of critical consciousness involves people moving through a series of stages (Freire, 1993, as cited in Campbell & MacPhail, 2002). The first of these phases is *intransitive thought*, which is characterised by naïve rather than critical consciousness where people lack the insight into the way that their social conditions undermine their health and welfare, and do not see their own actions as capable of changing their conditions (Campbell & MacPhail). This stage moves through other stages until the final stage that is *critical transitivity*. This stage is characterised by the dynamic interaction between critical thought and critical action triggered by the ability to think holistically and critically about one's condition. A critically intransitive thinker is empowered to critically reflect on the conditions that shape his or her life and work collectively to change these conditions on the basis of such critical insight (Campbell & MacPhail).

CONCLUDING REMARKS

The findings of the 2001 antenatal survey show that HIV/AIDS is a significant health problem in South Africa and it is estimated that 4.74 million individuals are now infected with HIV despite the intensive HIV prevention programmes that are in place

(HIV Survey, 2002). These high prevalence rates have significant implications on the future burden of HIV associated disease and the ability of the health system to cope with provision of adequate care and support facilities (HIV Survey).

The future impact of HIV/AIDS on young people is not inevitable and may be prevented when policy accepts and starts to combat the complex issues influencing youth sexual behaviour (Scurry, 2003). The evidence that education itself protects against HIV is strong ("Education and HIV/AIDS", 2002). HIV education to date has equipped youth with knowledge, but future programmes must venture beyond awareness to the peer norms and cultural influences young people negotiate in everyday life (Scurry). It has been outlined that Peer Education is a powerful means to influence youth and help develop healthy behaviours and practices ("Education and HIV/AIDS").

Peer educational approaches have the greatest chance of success if they provide a context in which young people can develop insights into the way in which gender relations undermine their sexual health; promote a belief that existing norms could be different; and then, within this context, encourage young women and men to collectively develop the belief and confidence in their power to resist dominant gender norms, in the interest of promoting their sexual health (Campbell & MacPhail, 2002). The next section focuses on the methodology adopted in this study within the context of OIL's peer education intervention in schools.

CHAPTER THREE - RESEARCH METHODOLOGY

This chapter focuses on the research method that was adopted. Specifically, it will look at programme evaluation and research, a description of the sample, the sampling process that was used, a discussion on the approach towards the research, a discussion around the chosen research instrument, and finally, the data analysis. This research is located within the quantitative paradigm and makes use of collected categorical data (Howell, 1995).

Programme Evaluation

Programme evaluation is described as the use of social research methods to systematically evaluate the effectiveness of social intervention programmes (Rossi et al., 1999). This evaluation entails a description of the performance of the entity being evaluated as well as some standards by which the performance is judged (Rossi et al.) and arises out of the need for social accountability (Potter, 1999). Programme evaluation research is about establishing whether social programmes are necessary, effective, and likely to be used (Potter). Evaluations range along a scale from microscopic, where one is concerned with concrete results in accomplishing specific learning objectives, to macroscopic perspectives, where the concern is with a broad range of results in accomplishing organisational and political goals (Horton, 2001).

There are a growing number of programme evaluations being conducted in South Africa, but this number is relatively small when compared to the amount of social programmes (Potter, 1999). Social research on HIV/AIDS has attempted to understand the gap between awareness and practice, through more research being focused on seeking to understand the social context of sexual practices and relationships (Harrison et al., 2001). The present study is an evaluation of the effectiveness of an HIV prevention programme using peer education and specifically is investigating the performance gap between the stated goals and aims of OIL and the actual current situation in terms of students' knowledge, attitudes and behaviours with regards to HIV/AIDS.

The main aim of programme evaluation is to construct a valid description of those areas of programme performance that are of concern, in a form that allows insightful comparison with the applicable standards (Rossi et al., 1999). Many evaluations take a layered approach based on a basic model developed by Kirkpatrick (1996, as cited in Horton, 2001). The first level in this model, termed *response* evaluation, measures participants' immediate reaction to the programme. The second level, or *learning* evaluation, evaluates how much knowledge, skills, attitudes, beliefs or understandings were acquired by participants as a result of the programme. The third level, *performance* evaluation, measures to what degree participants can, will and do apply their learning to their tasks and lives. Finally, level four, or *results* evaluation, measures the results of the intervention. The present study takes place at the second level, in that it is evaluating the learning acquired by the students participating in the OIL programme.

Programme evaluation involves the assessment of one or more of five programme domains as outlined by Rossi et al. (1999). These domains include evaluating the need for the programme, the design of the programme, the programme implementation and service delivery, the programme impact or outcome, and the programme efficiency. This study evaluates the implementation and service delivery of the OIL peer education intervention as well as its impact on the peer educators.

Rationale for Use of Questionnaires

The quantitative tool that was used in this research was survey research. The advantage of adopting the survey method was that surveys could be distributed easily to large amounts of students (Halonen & Santrock, 1999). Surveys can also be filled out at the convenience of the respondent ("Quantitative research techniques", n.d.) and this was an important aspect of this study as access into the schools relied on the efficiency of the data collecting procedure. Another advantage is that good surveys provide concrete, specific, and unambiguous questions (Halonen & Santrock). For this study on young teenagers it was important that the measuring instrument be unambiguous and easily understood. As social desirability can be a problem in research, where participants reveal what they think the researcher wants rather than what they truly feel or think, a considerable advantage of the self-administered survey

is the anonymity of the participant that can lead to more truthful and valid responses ("Quantitative research techniques").

For this study access to the participants was restricted and monitored carefully by the schools and therefore the survey method proved the most useful in that it allowed for the most information gathered, while not taking the students away from their school work.

Measuring Instrument

The self-administered survey (Appendix C) was compiled by OIL employees who had designed the course material and were involved in teaching the material as they had a thorough knowledge of the programme. The researcher requested input into the questionnaire, and this was granted, but in a limited form. This questionnaire was then translated into Afrikaans and Xhosa by the OIL employee who usually translates material for OIL purposes (see Appendix C, Questionnaires 1-3).

The Pre-test

The pre-test was standardised with several items testing for the appropriate knowledge and skills that Peer Educators need. This was administered to the experimental group (Peer Educators) and the control group (peers in the same grade) at the beginning of 2004. This measure consisted of questions that OIL considered strategic in understanding what they were trying to achieve in their programme. The first section consisted of demographic variables, namely gender, whether they were a peer educator, and which school they attended.

Questions in the next section examined where students would choose to go for a VCT and to whom they would disclose their results if they would disclose their status (Question 2-4, Questionnaire 2, Appendix C). In addition, the questionnaire questioned their attitudes towards HIV/AIDS, through questions around HIV positive friends and feelings towards these friends (Question 5-6, Questionnaire 2, Appendix C). In the third section, the questionnaire then measured students' attitudes, knowledge and behaviour around HIV/AIDS in a categorical table allowing them to

agree or disagree with statements around these areas (Questions 1-30, Questionnaire 2, Appendix C).

The Post-test

This test was administered to the experimental groups and the control groups in the second semester of 2004 and was the same as the pre-test, except for Question 4 (Questionnaire 2, Appendix C), where OIL added in the option *boyfriend/girlfriend* in the question around who students would tell if their HIV result was positive. This was due to most students specifying in the *other* category of the pre-test that they would disclose their positive status to their partner. A further difference in the tests was the inclusion of questions 5 and 6 (Questionnaire 2, Appendix C) only after School A had completed their pre-test.

Research Design

The net outcomes of an intervention can be conceptualised as the difference between persons who have participated in the programmes and the comparable persons who have not (Rossi et al., 1999). In this study the scores of the schools in the experimental group were compared with the scores from the control group to determine differences between the two groups.

Quasi-Experiment Description

This research made use of a quasi-experimental design: the term quasi-experiment is used to describe impact designs that do not involve randomly assigned comparison groups (Rossi et al., 1999). The most common of these designs involves constructing comparison groups in an attempt to approximate a randomised design (Rossi et al.). Quasi-experimental designs provide an alternate means for examining causality in situations that are not conducive to experimental control ("Ways of approaching research", n.d.).

Quasi-experimental designs are an attempt to control as many threats to validity as possible in situations where at least one of the three elements (manipulation, randomization, control group) of true experimental research is lacking ("Ways of approaching research"). Specifically this design is an Ex Post Quasi-Experiment as it

was not possible to construct the comparison groups before the programme was delivered (Rossi et al.). Therefore, an Ex Post comparison had to be made.

The control group came from the same class as the peer educators. In the process of choosing peer educators, learners were elected by classmates. Therefore, each group of students in their respective place in the intervention could be compared with a control group that did not have the intervention.

Sample

A non-probability sampling procedure was used for the sample and therefore did not involve random selection (Trochim, 1999). Purposive sampling is useful for situations where a targeted sample is needed and where sampling for proportionality is not the primary concern (Trochim). This was relevant to this study as the sample needed to be specifically targeted for the research.

This research focused on the Track-one candidates in the OIL programme. Therefore the sample consisted of learners from predominately Grade 10 classes from all the four schools in the researched community. Peer educators were selected for their trainability, their commitment to the project goals, and their credibility (Smith & DiClemente, 2000).

The sample was identified by OIL (2003) as fulfilling the following criteria:

- Individuals who would represent their class and grade and be trained and equipped in the area of HIV/AIDS, Sexuality and Lifestyle Education.
- Have a passion to be a positive role model, be opinionated, be reliable and trustworthy and be willing to work in a cross-cultural team.
- Possess leadership qualities, and have the strength of character to impact others' lives, and needed to be prepared to be trained in fulfilling the four roles of an OIL Peer Educator.
- Be willing to examine the choices being made in their own lives, challenging themselves on whether these decisions are having a positive impact on their future.

Before candidates were elected, these attributes were outlined in the chosen grades at the school. Then, based on these criteria, the classes elected 10-15 % of their class who they thought best fitted these criteria. These candidates were then chosen with the intention that when they have successfully completed the intervention that they would demonstrate these characteristics and knowledge. This group formed the experimental sample. The control sample was a group chosen by the school principal in each school, as was requested by the principals concerned. Tables 3.1 and 3.2 demonstrate the overall samples for the pre-test and the post-test.

	Experimental Group		**Control Group**		
	Female	**Male**	**Female**	**Male**	**Total**
School A	24	18	23	19	84
School B	10	11	9	5	35
School C	19	17	8	3	47
School D	7	6	5	10	28
Total	60	52	45	37	**194**

Table 3.1 - Pre-test sample

	Experimental Group		**Control Group**		
	Female	**Male**	**Female**	**Male**	**Total**
School A	15	12	14	13	54
School B	9	8	0	8	25
School C	9	4	5	0	18
School D	7	5	8	8	28
Total	40	29	27	29	**125**

Table 3.2 – Post-test sample

Procedure

Process evaluation validates what the programme is and whether or not it is delivered as intended to the target recipients (Scheirer, 1994, as cited in Rossi et al., 1999). In this study it was assumed that the distal goals can only be achieved if the proximal goals are achieved and therefore the success of the rest of the programme is

determined primarily on the success of the initial selection and training of the learners who would be peer educators.

	Pre-test	Intervention: Camp, Bimonthly meetings and Lube Lounges	Post-test
Experimental Group (Track 1 Peer Educators)	O1	X1	O2
Control Group	O1		O2

Figure 3.1 - Procedure of study

The complete set of data for this study was attained using self-administered surveys. These are represented by O1 and O2 in Figure 3.1. For the OIL peer educators the pre-test self-administered questionnaires were given to the learners as one of the first activities they performed on their camp trip, before any teaching began. For the post-test OIL peer educators filled out the self-administered questionnaire in the second semester of the school year in one of the bimonthly meetings. For the control group, surveys were taken by an OIL employee to the school and were left with the principals, who gave the surveys to the control sample as had been previously agreed. This occurred for both pre- and post-tests. As Figure 3.1 outlines, the intervention X1 was only given to the experimental group (peer educators).

Data Analysis

Descriptive statistics was used to outline the demographic variables of the pupils and correlation analysis was used to determine relationships in the data.

The type of data used in this study was categorical data and therefore the appropriate statistical analysis was the chi-square test (Howell, 1995). Because there was one categorical variable in this study, the Goodness-of-fit test was used. The goodness-of-fit test compares observed frequencies with theoretical predicted frequencies (Howell) and is also interpreted as a comparison of two or more populations (Keller & Warrack). The next chapter will outline the results following this analysis.

CHAPTER FOUR - RESULTS

Chi-square tests showed that there were no significant differences between the experimental group and the control group prior to the intervention, except in the *Behaviour* section of the table. This means that any observed differences in the areas excluding the *Behaviour* section, can be attributed to the success of the OIL intervention or extraneous variables. The tables showing these results can be found in Appendix B (Tables B1-B3, B8-B12).

Preferred place of testing

As a result of the low number of responses in the *teacher* and *NGO* categories, these were considered as falling into the *other* category as this increased the accuracy of the tests (Keller & Warrack, 2000).

It was observed that of the experimental group most of the students (47.32%) would go to a private doctor, while 35.71% of students would go to a local clinic for a VCT. It was also observed that the control group students would mostly go to a private doctor (47.56%) or a local clinic (41.46%), for a VCT.

There was no significant difference observed in the responses of the experiment group before and after the OIL intervention ($\chi 2=3.19$, $p=0.36$) with regards to their preferred place of testing. Likewise there was no significant difference observed in the control group before and after the OIL intervention ($\chi 2=2.19$, $p= 0.53$). Tables B13-B15 (Appendix B) indicates the results for the Chi-square tests in this regard.

Disclosure of test results

In the pre-test, it was observed that the majority of students in both the experiment group (84.68%) and the control group (82.93%) felt that they would tell someone if their result was positive. In the post-test these findings were similar in that 89.86% of the experimental group and 87.5% of the control group felt they would tell someone if their test were positive. There was no significant difference observed between the experimental group and control group before ($\chi 2= 0.11$, $p=0.74$) or after the intervention ($\chi 2=0.17$, $p=0.68$).

Differences between schools and disclosure rates

An investigation was made to test whether there was a significant difference in responses before and after the intervention depending on which school the students attended.

A significant difference was observed overall between the disclosure rates of students at different schools ($\chi 2=11.51$, $p=0.009$). This means that disclosure rates of students in the pre-test did depend on which school they attended. On further investigation, a significant difference was observed between Schools B and D ($\chi 2=7.00$, $p=0.008$) and between Schools C and D ($\chi 2=8.55$, $p=0.003$), where 91.43% of School B, 91.49% of School C and 64.29% of School D reported that they would tell someone if their results were positive. However there was no significant difference in students' responses from school to school post the intervention ($\chi 2=5.00$, $p=0.17$).

The test for significant differences between School B and D in the experimental group in the pre-test was significant ($\chi 2=4.11$, $p=0.04$). Therefore significantly more peer educators at School B (90.48%) indicated that they would tell someone if their test were positive than School D (61.54%). Although the results were not significant for the control groups at these schools in the pre-test ($\chi 2=3.03$, $p=0.08$), they were nearly significant and the frequency tables revealed that 92.86% of the control group at School B would tell someone, while only 66.67% of School D's control group would tell someone.

Again, while the post-test results did not reveal significant differences between Schools B and D in the experimental group ($\chi 2=3.04$, $p=0.08$), 100% of School B's experimental group and 83.33% of School D's experimental group would tell someone if their test were positive.

A significant difference was found between the experimental groups at Schools C and D ($\chi 2=6.34$, $p=0.01$) in the pre-test, where 91.67% of School C and 61.54% of School D stated that they would tell someone if they tested positive. There was no significant difference found between the control groups at these two schools ($\chi 2=2.10$, $p=0.14$).

In the post-test there were no significant differences between either the experimental groups ($\chi 2=0.48$, $p=0.49$) or control groups ($\chi 2=1.09$, $p=0.3$) from the two schools. However it was observed that of the experimental group, 92.31% at School C and 83.33% of School D stated that they would tell someone if their test were positive. Therefore it would seem that peer educators of the OIL programme at School D were more likely to disclose their status after the intervention than peer educators at School C. There were, however, no significant differences observed in the experimental groups from before to after the intervention in any of the schools (see Tables B16-B19, Appendix B), indicating that the intervention had no significant impact on the peer educators, when observed in schools, in terms of increasing intended disclosure of positive status.

Preferred recipient of disclosure

As participants were able to select more than one category, in this section of the questionnaire, each category was treated as a separate question.

	Experimental Group		Control Group	
	Pre-test	**Post-test**	**Pre-test**	**Post-test**
Family	31.13%	31.88%	30.49%	28.57%
Teacher	10.38%	5.80%	6.10%	6.25%
Pastor	13.21%	8.54%	7.25%	8.33%
Friend	46.23%	42.03%	39.02%	37.50%
Other	12.38%	39.13%	8.54%	44.64%

Table 4.1 – Preferred recipient of disclosure

As is evident from Table 4.1, it was observed that in the pre-test experimental group most students would prefer to tell a friend, followed by a family member. This changed slightly in the post-test when after telling a friend most students stated they would tell another person (*other* category).

In the control pre-test, most students would tell a friend, followed by family if their result was positive, while in the control group post-test most students would tell another person (*other* category), and secondly would prefer to disclose to a friend. In the next section, each category will be discussed in more detail.

Decision to disclose to a family member

Table 4.1 above, demonstrates that students' responses in this section indicated a relatively low preference for disclosure to a family member; however, this result was still higher than most of the other options given. There was no significant difference in either the control group's ($\chi2=0.59$, $p=0.81$) or the experimental group's ($\chi2=0.01$, $p=0.92$) responses before or after the intervention. There were also no significant differences in participants' responses from different schools before the intervention ($\chi2=6.60$, $p=0.09$), or after the intervention ($\chi2=1.61$, $p=0.66$). The results for this section are reflected in Tables B3-B7 (Appendix B).

Decision to disclose to a teacher

The prevalence of disclosure to a teacher was very low (Table 4.1) and again, there was no significant difference in the experimental group's responses ($\chi2=1.12$, $p=0.29$) or in the control group's responses ($\chi2=0.03$, $p=0.85$) before or after the intervention. A significant difference was observed in responses to this question between the different schools in the pre-test ($\chi2=19.50$, $p=0.0002$). These differences were between Schools A and C ($\chi2=16.54$, $p=0.00004$), and Schools C and D ($\chi2=5.14$, $p=0.02$). In the post-test no significant difference was observed overall between the schools ($\chi2=2.09$, $p=0.55$).

When experimental and control groups were separated in the analysis there was a significant difference found between the experimental groups ($\chi2=10.40$, $p=0.001$) from Schools A and C, where none of the peer educators at School A and 22.22% at School C would tell a teacher if their test were positive.

There was also a significant difference observed ($\chi2=7.74$, $p=0.005$) in the control groups at these two schools, where 2.38% of School A's control group and 27.27% of School C's control group stated that they would tell a teacher if the test were positive. In the post-test there was no significant difference between Schools A and C's experimental groups ($\chi2=0.29$, $p=0.59$), or control group ($\chi2=1.91$, $p=0.17$). In School A, 3.7% of the experimental group said they would tell a teacher, while 7.69% of School C said that they would tell a teacher.

When experimental and control groups were separated in the analysis there was no significant difference in the pre-test between Schools C and D's experimental groups ($\chi 2=3.45$, $p=0.06$), or control group ($\chi 2=2.07$, $p=0.15$). None of School D and 22.22% of School C would tell their teacher. There was no significant difference in the post-test between Schools C and D's experimental groups ($\chi 2=0.003$, $p=0.95$), or control group ($\chi 2=0.84$, $p=0.36$).

Decision to disclose to a pastor

Table 4.1 demonstrates that students' responses in this section indicated a low preference for disclosure to a pastor. There was no significant difference observed in the experiment group ($\chi 2=1.53$, $p=0.22$) or in the control group ($\chi 2=0.006$, $p=0.94$) before or after the intervention. This result is reflected in Table B9 (Appendix B). Responses before the intervention ($\chi 2=3.75$, $p=0.30$) and responses after the intervention ($\chi 2=2.67$, $p=0.44$) were not dependent on which school participants attended.

Decision to disclose to a friend

Table 4.1 demonstrates that students' responses in this section indicated the highest preference for disclosure to a friend. Again, there were no significant differences observed in either the experimental group ($\chi 2=0.30$, $p=0.59$) or control group ($\chi 2=0.0009$, $p=0.98$) before or after the intervention. There were also no significant differences observed in responses before ($\chi 2=3.50$, $p=0.32$) or after ($\chi 2=0.17$, $p=0.98$) the intervention with regards to which school participants attended.

Decision to disclose to another person (Other)

In addition to these categories a final category termed *other* was included for participants to use if they felt that there was someone they would tell that was not an option in the questionnaire. In the pre-test most participants who used this category specified that they would tell their boyfriend or girlfriend if the test result was positive. In the post-test, OIL added the category *boyfriend/girlfriend* to the question and therefore to allow for comparison it was captured in the data as *other*.

Like with all the previous questions, there were no significant differences observed between the experimental group and the control group before the intervention (see

Table B11, Appendix B). Similarly, when analysed, there were no significant differences between the two groups post the intervention ($\chi 2=0.08$, $p=0.78$). However, when observing the experimental group for significant differences from before and after the intervention, a significant result was found ($\chi 2=16.83$, $p=0.00004$), which was also observed in the control group from before and after the intervention ($\chi 2=24.36$, $p=0.000001$). Therefore there is a strong probability that the reason for this significant difference is due to the change made in the questionnaire and not due to the intervention itself. No significant differences were observed between the schools before ($\chi 2=7.13$, $p=0.68$) or after ($\chi 2=3.31$, $p=0.35$) the intervention.

Feelings towards friends who disclose HIV status

This question asked whether students felt their feelings would change for a friend who disclosed their HIV status to them. The section following this, will observe how students felt these feelings would change.

There was no significant difference between the experimental group and the control group in the pre-test ($\chi 2=3.77$, $p=0.05$). It was observed that in the pre-test, 32% of the experimental group felt their feelings would change, while 68% of the control group felt their feelings would change. There was also no significant difference between the experiment group and control group after the intervention ($\chi 2=0.51$, $p=0.48$). In the post-test it was observed that 38.89% of the experimental group felt that their feelings would change, while 61.11% of the control group felt their feelings would change.

There were no significant differences observed between the schools before the intervention ($\chi 2=7.23$, $p=0.07$). But there was a significant difference between the schools after the intervention ($\chi 2=8.52$, $p=0.04$). These significant differences were between Schools A and D ($\chi 2=6.95$, $p=0.008$), Schools B and D ($\chi 2=8.60$, $p=0.003$), and Schools C and D ($\chi 2=4.73$, $p=0.03$). There were no significant differences found in either the control groups or the experimental groups in the different schools from before to after the intervention (See Tables B20-B35, Appendix B). When experimental and control groups were separated in the analysis there was no significant difference in the pre-test between Schools A and D experimental groups

(χ2=0.64, p=0.42), or control groups (χ2=0.94, p=0.33). In the experimental group, 16.67% of School A and 7.69% of School D stated that their feelings would change for a friend who told them they were HIV positive. There were also no significant differences between School A and D in the post-test experimental group (χ2=3.65, p=0.06), or control group (χ2=0.62, p=0.43).

When experimental and control groups were separated in the analysis there were also no significant differences in the pre-test between Schools B and D experimental groups (χ2=2.93, p=0.09), or control groups (χ2=1.16, p=0.28). In the experimental group 33.33% of School B and 7.69% said that their feelings would change for a friend who told them they were HIV positive. There was a significant difference between School B and D in the post-test experimental group (χ2=6.04, p=0.01), where in School B, 41.18% said that their feelings for a friend with HIV would change, while at School D, none of the peer educators felt their feelings would change.

There was no significant difference in the pre-test, in either the experimental group (χ2=0.34, p=0.56), or control group (χ2=0.58, p=0.45) from Schools C and D, when experimental and control groups were separated in the analysis. However there was a significant difference (χ2=4.06, p=0.04) found between the experimental groups from Schools C and D in the post-test. In School C, 30.77% felt that their feelings would change for an HIV positive friend, while at School D, none of the peer educators felt their feelings would change for an HIV positive friend. There was no significant difference (χ2=1.09, p=0.29) found between the control group from Schools C and D in the post-test.

Ways in which feelings would change

This study sought to understand what individuals thought they would feel if they found out a friend was HIV positive. Because individuals could indicate more than one answer, each category was treated as a separate question.

	Experimental Group		Control Group	
	Pre-test	Post-test	Pre-test	Post-test
Fear of infection	5.45%	5.13%	19.3%	18.6%
Feelings of sadness	60%	64.1%	73.68%	67.44%
Feelings of anger	29.1%	20.51%	22.8%	25.58%
No difference	74.5%	58.97%	57.89%	46.51%
Other	3.64%	7.7%	7.02%	11.63%

Table 4.2 - Ways in which feelings would change

As Table 4.2 outlines, in the pre-test and post-test experimental group, most students indicated that they would feel no different if their friend disclosed their positive HIV status to them. This feeling was followed by feelings of sadness that their friend was HIV positive. Very few peer educators in either the pre-test or the post-test indicated that they would be afraid of becoming infected from their friend. Although the control group in both the pre-test and the post-test had the same ranking for these feelings as the experimental group, all the percentages were higher in this group.

Fear of infection

In the pre-test 5.45% of the peer educators and 19.3% of the control group felt that they would feel scared about becoming infected by being close to their friend. This difference was found to be significant ($\chi 2$=4.9, p=0.03). In the post-test 5.13% of the peer educators and 18.6% of the control group were scared that they could catch HIV from being close to their friend. Although this difference was not significant, it was very nearly significant ($\chi 2$=3.48, p=0.06).

Feelings of sadness

There was no significant difference ($\chi 2$=2.37, p=0.12) observed between the experimental group and the control group in the pre-test, where 60% of the peer educators and 73.68% of the control group felt that they would feel sad that their friend was sick. In the post-test, 64.1% of the peer educators and 67.44% of the control group would feel sad that their friend was sick. Again this difference was not significant ($\chi 2$=0.1, p=0.75).

Feelings of anger

There was no significant difference ($\chi 2$=0.58, p=0.45) observed between the experimental group and the control group in the pre-test, where 29.1% of the peer educators and 22.8% of the control group felt that they would feel angry that their friend had behaved sexually irresponsibly. In the post-test, 20.5% of the peer educators and 25.58% of the control group would feel angry at their friend. This difference was not significant ($\chi 2$=0.3, p=0.59).

No difference in feelings

There was no significant difference ($\chi 2$=4.02, p=0.13) found between the experimental group and the control group in the pre-test, where 74.5% of the experimental group and 57.89% of the control group felt that they would feel no different towards a friend who disclosed their status to them. In the post-test, 58.97% of the experimental group and 46.51% of the control group felt that they would feel no different towards a friend who disclosed their status to them. This difference was not significant ($\chi 2$=1.27, p=0.26).

Other

Only 3.64% of the experimental group and 7.02% of the control group indicated the *other* option in the pre-test and this difference was not significant ($\chi 2$=0.63, p=0.43). In the post-test, 7.7% of the experimental group and 11.63% of the control group indicated *other*. This difference was not significant ($\chi 2$=0.36, p=0.55).

KNOWLEDGE, ATTITUDES AND BEHAVIOURS

The second part of the questionnaire contained a set of statements with which students either agreed or disagreed. Certain questions related to knowledge around HIV and STI's while others related to the desired behaviour and attitudes. Variables were therefore collapsed into these three sections: knowledge, attitudes and behaviours.

Knowledge

In this section four questions were asked referring to the knowledge students had around HIV/AIDS and sexual facts (Table questions 1-4, Questionnaire 2, Appendix C). Although questions 6 and 7 were relevant and could have been included they were not included in the pre-test given to School A, and therefore were omitted for the

analysis. In addition question 5 was left out of the analysis as the question was worded in such a way that either answer was correct. The question asked "If two people who are HIV positive have sex together, they do not have to use a condom", and therefore students could answer *yes* they should use a condom, or *yes* they do not have to use a condom.

Knowledge	Experimental Group	Control Group	Total
0 correct	1 (0.89%)	0	1
1 correct	4 (3.57%)	1 (1.22%)	5
2 correct	22 (19.64%)	7 (8.54%)	29
3 correct	45 (40.18%)	41 (50.00%)	86
4 correct	40 (35.71%)	33 (40.24%)	73
All Groups	112	82	194

Table 4.3 – Frequency of correct answers in the pre-test

As Table 4.3 indicates, it was observed that of the pre-test experimental group, 35.71% of students answered all four questions correctly and in the control group, 40.24% answered all four questions correctly. There was no significant difference between the experimental and control groups in terms of their knowledge in the pre-test ($\chi 2=6.94$, $p=0.14$). There was a significant difference ($\chi 2=26.05$, $p=0.01$) observed overall between schools in terms of differences in knowledge (Table B36, Appendix B). These significant differences were found between Schools A and C ($\chi 2=14.45$, $p=0.005$), Schools B and C ($\chi 2=6.59$, $p=0.04$), and Schools C and D ($\chi 2=9.00$, $p=0.03$).

When the experimental group and control groups were separated significant differences were found between control groups of Schools A and C ($\chi 2=9.06$, $p=0.03$) and the experimental groups of Schools C and D ($\chi 2=9.47$, $p=0.02$) in the pre-test. It was observed that more students at School A and D got all questions correct than students at School C (Table B37, Appendix B).

Knowledge	Experimental Group	Control Group	Total
0 correct	0	0	0
1 correct	1 (1.45%)	2 (3.57%)	3
2 correct	7 (10.14%)	8 (14.29%)	15
3 correct	20 (28.99%)	17 (30.36%)	37
4 correct	41 (59.42%)	29 (51.79%)	70
All Groups	69	56	125

Table 4.4 – Frequency of correct answers in the post-test

As Table 4.4 indicates, it was observed that of the experimental group, 59.42% of students answered all four questions correctly and in the control group, 51.79% answered all four questions correctly. There was no significant difference between the experimental and control groups in terms of their knowledge in the post-test ($\chi 2=1.36$, $p=0.71$).

There was also no significant difference ($\chi 2=16.19$, $p=0.06$) observed between schools in terms of differences in knowledge. However, when the experimental groups and control groups were analysed separately, significant differences were found between the experimental groups ($\chi 2=12.83$, $p=0.004$) and control groups ($\chi 2=9.1$, $p=0.028$) of Schools A and C and between the experimental groups of Schools C and D ($\chi 2=8.52$, $p=0.04$). In the experimental groups more peer educators at School A (77.78%) and School D (58.33%), got all the questions correct than peer educators at School C (23.08%).

	Pre-test				Post-test			
	Experimental Group (n=112)		Control Group (n=82)		Experimental Group (n=69)		Control Group (n=56)	
	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect
Q1	90	22	73	9	61	8	46	10
Q2	73	39	62	20	47	22	38	18
Q3	75	37	58	24	64	5	48	8
Q4	105	7	77	5	67	2	53	3

Table 4.5 – Summary of questions answered

Table 4.5 demonstrates how many students in each group in the pre- and post-test got each question correct. Therefore in the pre-test experimental group the most incorrect answers were for question 2, which asked whether all STI's can be cured, while the

most correct answers were for the question about whether an infected man can be cured of HIV by having sex with a virgin (question 4). In the pre-test control group, the most incorrect answers was for question 3, which asked whether it was important to have counselling before an HIV test, while the most correct answers was also for question 4.

In the post-test experimental group the most incorrect answers was again Question 2 which asked whether all STI's can be cured, while the most correct answers were again for question 4. In the post-test control group the most incorrect answers was also for question 2, while the most correct answers was also question 4.

These results were then divided into schools to investigate whether certain schools indicated certain questions to be correct. These results are reflected in the following tables under each knowledge question.

	Pre-test				**Post-test**			
	Experimental Group		**Control Group**		**Experimental Group**		**Control Group**	
	Correct	**Incorrect**	**Correct**	**Incorrect**	**Correct**	**Incorrect**	**Correct**	**Incorrect**
A	36	6	38	4	26	1	25	2
B	15	6	12	2	15	2	6	2
C	29	7	10	1	10	3	3	2
D	10	3	13	2	10	2	12	4

Table 4.6 - Question 1: Many people who have a STI do not know they have one.

Most students in both groups and in both the pre- and post-test got this question correct. However it is observed that the amount of incorrect answers decreased in the experimental group from the pre-test to the post-test, while in the control group it remained the same, despite the decrease in the sample size. This could indicate an increase of knowledge in the experimental group. However this observed difference was not found to be significant ($\chi 2=1.1$, $p=0.29$).

	Pre-test				Post-test			
	Experimental Group (n=112)		Control Group (n=82)		Experimental Group (n=69)		Control Group (n=56)	
	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect
A	32	10	37	5	21	6	20	7
B	15	6	11	3	11	6	3	5
C	17	19	4	7	6	7	2	3
D	9	4	10	5	9	3	13	3

Table 4.7 - Question 2: All STI's can be cured

More students across the tests and groups seemed to get question 2 incorrect. In particular School C saw more students get this incorrect than students getting it correct in both the control and experiment groups and this occurred in both the pre-test and the post-test.

	Pre-test				Post-test			
	Experimental Group (n=112)		Control Group (n=82)		Experimental Group (n=69)		Control Group (n=56)	
	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect
A	23	19	25	17	26	1	23	4
B	21	0	12	2	16	1	7	1
C	21	15	10	1	11	2	3	2
D	10	3	11	4	11	1	15	1

Table 4.8 - Question 3: It is important to have counselling before having an HIV test

Most students got question 3 correct; however it was interesting to note that School A had a high number of incorrect answers in comparison with the other schools, except perhaps with School C's pre-test experimental group. However in the post-test most of the students in both the experimental and control groups in School A got this question correct. This result was significant ($\chi 2=5.11$, $p=0.02$), therefore less students in School A got this question incorrect in the post-test.

	Pre-test				Post-test			
	Experimental Group (n=112)		Control Group (n=82)		Experimental Group (n=69)		Control Group (n=56)	
	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect
A	41	1	42	0	26	1	27	0
B	20	1	12	2	17	0	8	0
C	31	5	8	3	13	0	4	1
D	13	0	15	0	11	1	14	2

Table 4.9 - Question 4: If an infected man has sex with a virgin it will cure him of HIV

Most students across all the schools answered question 4 correctly (Table 4.9). In the pre-test the most incorrect answers came from School C and in the post-test from School D. However there were no significant differences between schools in terms of this question.

The correlation analysis indicated that there has been a significant weak positive effect overall on the students' knowledge ($r=0.14$, $p<0.05$). However, when experiment and control groups were examined individually there was no significant correlation found.

Attitudes

Here, three questions were asked so students could indicate their attitudes around HIV/AIDS (Questions 14, 15 and 18, Appendix C).

Attitude	School A	School B	School C	School D	Total
0 desired attitudes	2 (2.38%)	0 (0.00%)	0 (0.00%)	1 (3.57%)	3
1 desired attitude	2 (2.38%)	2 (5.71%)	9 (19.15%)	2 (7.14%)	15
2 desired attitudes	29 (34.52%)	13 (37.14%)	15 (31.91%)	8 (28.57%)	65
3 desired attitudes	51 (60.71%)	20 (57.14%)	23 (48.94%)	17 (60.71%)	111
All Groups	84	35	47	28	194

Table 4.10 - Summary of attitudes reflected over schools in the pre-test

In this study it was observed that 57.14% of the experimental group indicated that they had all three of the desired attitudes (as indicated in Table 4.10). In the control group 57.14% also indicated that they had all three of the desired attitudes. There was no significant difference between the experimental and control group ($\chi 2=0.23$, $p=0.97$). There were no significant differences ($\chi 2=14.83$, $p=0.09$) observed between the schools in terms of desired attitudes in the pre-test.

Attitude	Experimental Group	Control Group	Total
0 desired attitudes	3 (4.35%)	2 (3.57%)	5
1 desired attitude	3 (4.35%)	6 (10.71%)	9
2 desired attitudes	23 (33.33%)	16 (28.57%)	39
3 desired attitudes	40 (57.97%)	32 (57.14%)	72
All Groups	69	56	125

Table 4.11 – Frequency of desired responses in the pre-test

Table 4.11 indicates the frequency of students' in the post-test reflecting that they have desired attitudes. It was observed that 57.97% of experimental group indicated that they had all three of the desired attitudes and this was almost exactly the same as the experimental group (57.14%). There was no significant difference between the experimental and control group ($\chi 2=2.02$, $p=0.57$). Again, there were no significant differences observed between the schools ($\chi 2=14.83$, $p=0.09$).

Attitude	School A	School B	School C	School D	Total
0 desired attitudes	3 (5.56%)	0 (0.00%)	0 (0.00%)	2 (7.14%)	5
1 desired attitudes	6 (11.11%)	0 (0.00%)	1 (5.56%)	2 (7.14%)	9
2 desired attitudes	14 (25.93%)	10 (40.00%)	5 (27.78%)	10 (35.71%)	39
3 desired attitudes	31 (57.41%)	15 (60.00%)	12 (66.67%)	14 (50.00%)	72
All Groups	54	25	18	28	125

Table 4.12 - Summary of attitudes reflected over schools in the post-test

There were no significant differences observed between different schools and desired attitudes in the post-test ($\chi 2=7.67$, $p=0.57$). Table 4.12 outlines the observed differences between the schools and the desired attitudes reflected. No significant correlation was found between the reflected attitudes of the students before and after the OIL intervention.

	Pre-test				Post-test			
	Experimental Group (n=112)		Control Group (n=82)		Experimental Group (n=69)		Control Group (n=56)	
	Desired	Undesired	Desired	Undesired	Desired	Undesired	Desired	Undesired
Q14	96	15	71	9	57	11	45	11
Q15	104	6	76	5	62	5	50	6
Q18	76	32	55	19	50	18	39	17

Table 4.13 – Frequency of desired responses in the post-test

Table 4.13 reflects how many students in each group indicated each desired attitude. The highest count of an undesired attitude was for question 18 (see table in Questionnaire 2; Appendix C), which means that more students indicated that they had not decided to wait to have sex. Most students disagreed with the notion that one needs to be engaging in sex to be fulfilled in a relationship. Tables B38-B40 (Appendix B) indicates the frequency of desired attitudes for each group in each school in the post-test.

Behaviour

In this section, six questions from the table in the questionnaire were used to investigate students' behaviours (Questions 9, 19-23; Appendix C).

Behaviour	Experimental Group	Control Group	Total
0 Desired Behaviours	2 (1.79%)	2 (2.44%)	4
1 Desired Behaviours	4 (3.57%)	0 (0.00%)	4
2 Desired Behaviours	5 (4.46%)	3 (3.66%)	8
3 Desired Behaviours	54 (48.21%)	40 (48.78%)	94
4 Desired Behaviours	35 (31.25%)	26 (31.71%)	61
5 Desired Behaviours	10 (8.93%)	11 (13.41%)	21
6 Desired Behaviours	2 (1.79%)	0 (0.00%)	2
All Groups	112	82	194

Table 4.14 – Overall summary of desired behaviours reflected in the pre-test

Table 4.14 indicates the frequency of desired behaviours being demonstrated by the students in the pre-test. Only 1.79% of students in the experimental group and none of the control group indicated that they engaged in all 6 desired behaviours. There was no significant difference between the experimental and control group ($\chi 2=5.45$, $p=0.49$). Table B41 (Appendix B) indicates the differences between desired behaviours indicated by students and different schools. There was no significant difference observed between different schools in terms of desired behaviours indicated ($\chi 2=21.78$, $p=0.24$).

Behaviour	Experimental Group	Control Group	Row
0 Desired Behaviours	1 (1.45%)	1 (1.79%)	2
1 Desired Behaviours	3 (4.35%)	0 (0.00%)	3
2 Desired Behaviours	3 (4.35%)	6 (10.71%)	9
3 Desired Behaviours	40 (57.97%)	33 (58.93%)	73
4 Desired Behaviours	18 (26.09%)	8 (14.29%)	26
5 Desired Behaviours	4 (5.80%)	7 (12.50%)	11
6 Desired Behaviours	0 (0.00%)	1 (1.79%)	1
All Groups	69	56	125

Table 4.15 - Overall summary of desired behaviours reflected in the post-test

Table 4.15 indicates the frequency of desired behaviours being demonstrated by the students in the post-test. None of the students in the experimental group and 1.79% of the control group indicated that they engaged in all 6 desired behaviours. There was no significant difference observed between different schools and desired behaviours indicated ($\chi 2=21.78$, $p=0.24$).

Table B42 (Appendix B) indicates the differences between desired behaviours indicated by students and different schools in the post-test. There was no significant difference observed between different schools and desired behaviours indicated ($\chi 2=27.60$, $p=0.07$). Here again, no significant correlation was found between the students' behaviour and the OIL intervention. These last two sections show that even though the students' knowledge has increased as a result of the OIL intervention, this increase has had little or no effect on their attitude and behaviour towards sex and HIV.

	Pre-test				Post-test			
	Experimental Group		Control Group		Experimental Group		Control Group	
	Desired	Undesired	Desired	Undesired	Desired	Undesired	Desired	Undesired
Q9	13	98	10	71	6	61	11	44
Q19	9	99	4	75	11	54	5	46
Q20	19	87	13	67	12	52	4	48
Q21	8	100	7	71	3	64	3	52
Q22	37	70	22	55	23	43	15	36
Q23	42	47	40	30	22	29	12	28
Q30	21	85	21	58	20	45	16	39

Table 4.16 – Summary of responses to each question by both groups

Table 4.16 indicates that most students reflected that they engaged in undesired behaviours with regards to their sexuality and HIV/AIDS. The highest indicated desired behaviour in the pre-test and post-test experimental group was for Question 23 (*If you have sex, do you use a condom every time?*), while the highest undesired behaviour reflected by the students', was for Question 21 (*Have you ever had sex because you had too much alcohol?*) in the pre-test and Question 19 (*Do you have more than one sexual partner at the moment?*) in the post-test. In the control group the highest desired behaviour was Question 22 (*Have you used a condom before?*) in the pre-test and Question 30 (*Have you been involved in any other kind of sexual activity?*) in the post-test, while the highest indicated undesired behaviour was Question 21 in the pre-test and in the post-test. Tables B36-B42 (Appendix B) indicates the frequency of desired behaviours for each group in each school in the post-test.

The next section provides the results of an investigation into the relationships between some of the attitudes and perceptions students had against their stated behaviours.

The relationship between the perception of risk and sexual behaviour

This section analysed the differences between students' perception of being at risk of contracting HIV/AIDS against their sexual behaviour (Questions 8 and 17, Appendix C).

In the pre-test experimental group, 61.1% of the 41 students who had had sex perceived that they were at risk of contracting HIV/AIDS (See Tables B43-B44, Appendix B). There was no significant difference in perceptions of risk between those students who had had sex and those who had not had sex ($\chi 2$=2.77, p=0.10) in the pre-test experimental group. In the pre-test only two people of the control group stated that they had had sex. One of these students perceived that they were at risk of contracting HIV/AIDS; while the other stated that they did not perceive themselves to be at risk (see Tables B45-B46, Appendix B). There was no significant difference in perception of risk between those students who had had sex and those who had not had sex ($\chi 2$=0.006, p=0.94) in the pre-test control group.

In the post-test, of the 20 members of the experimental group who had had sex, 30% perceived themselves to be at risk of contracting HIV/AIDS, while 70% did not perceive themselves to be at risk (See Tables B47-B48, Appendix B). There was no significant difference in perception of risk between those students who had had sex and those who had not had sex ($\chi 2$=0. 87, p=0.35) in the post-test experimental group. For the post-test control group, 14 students stated that they had had sex and 64.3% of these students perceived that they were at risk of contracting HIV/AIDS (See Tables B49-B50, Appendix B). There was no significant difference in perception of risk between those students who had had sex and those who had not had sex ($\chi 2$=0. 10, p=0.75) in the post-test control group.

Relationship between having had an HIV test and sexual behaviour

This section examined students who were sexually active and had been for an HIV test (Questions 9 and 17, Appendix C). Of the 18 students who had had sex in the pre-test experimental group, only 1 student had been for a HIV test.

What is interesting is that of the 89 students in the pre-test experimental group, who stated that they had not had sex, 10 students stated that they had been for a test (See Tables B51-B52, Appendix B). In the pre-test control group, 2 of the 3 students who claimed that they had had sex had gone for an HIV test before (See Tables B53-B54, Appendix B). There was a significant difference in terms of going for an HIV test ($\chi 2$=9.29, p=0.002), in the pre-test control group, between those students who had had sex and those students who had not had sex.

In the post-test experimental group, of the 21 students who claimed to have had sex, only 4 had gone for an HIV test (See Table B55-B56, Appendix B). This difference was not significant ($\chi 2$=3.82, p=0.05). In the post-test control group, 5 of the 14 students claiming to have had sex before, had been for an HIV test (see Tables B57-B58, Appendix B). This result was also not significant ($\chi 2$=2.9, p=0.08).

Relationship between condom usage and gender

There was a significant difference found in the pre-test experimental group between males and females in terms of condom usage ($\chi 2$=3.93, p=0. 047).

	Always Use Condom	**Female**	**Male**	**Row**
Pre-test	**Yes**	18 (37.50%)	24 (58.54%)	42
	No	30 (62.50%)	17 (41.46%)	47
	All Groups	48	41	89
Post-test	**Yes**	13 (43.33%)	9 (42.86%)	22
	No	17 (56.67%)	12 (57.14%)	29
	All Groups	30	21	51

Table 4.17 – Relationship between condom usage and gender

As Table 4.17 indicates there were more males who claimed to use a condom every time they had sex than females. There is a concern that potentially this question was confusing for females to answer and therefore did not answer, or answered *no*. However, as Table 4.17 indicates, 29 females indicated that they had had sex. There was no significant difference found between male and female participants in the pre-test control group in terms of condom usage in every sexual encounter ($\chi 2$=0.81, p=0.37).

After the OIL intervention there was no significant difference between the females and males in terms of condom usage every time they had sex ($\chi 2$=0.001, p=0.97) in

the experimental group. Of the females, 56.67% indicated that they do not use condoms every time that they have sex, while 57.14% of the males indicated that they do not use condoms every time they have sex. There was also no significant difference in the post-test control group ($\chi 2$=0.005, p=0.94), where 70.59% of females and 69.57% of males indicated that they do not use condoms every time that they have sex.

The relationship between having more than one sexual partner and using a condom in every sexual encounter

	More than one sexual partner	Always Use Condom	Don't Always Use Condom	Row
Pre-test	**Yes**	7 (16.67%)	1 (2.17%)	8
	No	35 (83.33%)	45 (97.83%)	80
	All Groups	42	46	88
Post-test	**Yes**	8 (38.10%)	3 (10.34%)	11
	No	13 (61.90%)	26 (89.66%)	39
	All Groups	21	29	50

Table 4.18– Relationship between condom usage and more than one sexual partner

In the pre-test there was a significant difference ($\chi 2$=5.58, p=0.02) in condom usage observed in the experiment group between students who had more than one sexual partner at that time. The difference was that only one of the eight students (see Table 4.18) who claimed to have more than one sexual partner at that time did not always use a condom. There was no significant difference in the pre-test control group ($\chi 2$=3.27, p=0.07).

In the post–test there was also a significant difference ($\chi 2$=5.47, p=0.02) in condom usage found in the experimental group between students who have multiple sexual partners. However there was no significant difference ($\chi 2$=0.63, p=0.43) found in the control group.

The next chapter will discuss these results in relation to relevant literature and the goals of OIL.

CHAPTER FIVE - DISCUSSION

It has been argued that the most cost effective HIV/AIDS preventative interventions in South Africa are ones that target South African youth (MacPhail & Campbell, 2001) and that the failure to intervene at the youth level would sustain an epidemic of devastating proportions (Stadler & Hlongwa, 2002). Campbell and Foulis (2002) have outlined that, in order for interventions to occur effectively, there need to be effective partnerships between the grassroots communities, organisations and government agencies and where possible, that appropriate private sector and donor agencies at local, national and international levels need to be involved. HIV/AIDS is particularly impacting the youth of South Africa and therefore is impacting the future workforce and economically active population of the country. Due to the need for social capital for the successful implementation of peer education in schools (Campbell & Foulis), there is a great need for assistance from both private and governmental organisations in this regard.

Campbell and Lubben (2003) have advocated that a link between a school and the community it serves, including learners' parents and family members, on HIV/AIDS education is an important and necessary component of the school's health promoting environment. In their study in Namibian schools they indicated that, like many African countries dealing with the HIV/AIDS pandemic, education is the key to protecting citizens (Campbell & Lubben).

OIL (2003) and others (e.g. Campbell & Foulis, 2002; "Education and HIV/AIDS", 2002) have outlined HIV/AIDS as being one of the most devastating problems facing South African education. Therefore, through their programme, OIL aims to provide a means of educating adolescents to enable a continuous reduction of sexual activity, multiple sexual partners, transmission of HIV/AIDS and other STI's, AIDS deaths, HIV/AIDS stigma and apathy. The primary goal of this study was to assess whether the OIL intervention programme was effective in terms of its aims in addressing some of these issues facing students in schools in South Africa.

OIL (2004) have outlined that indicators for the programme's effectiveness would be an increase in sexual abstinence from sexual activity, participation in VCT and HIV disclosures, protective behaviour and faithfulness (appropriate use of condoms in every sexual encounter and monogamous relationships), adolescent clinic attendance (including recognition and treatment of STI's) and adolescences filled with vision and purpose. Primarily this study has investigated the effectiveness of this first year of the OIL intervention over four secondary schools. The results of this study will now be discussed.

Peer education is demanding on participants as they are expected to believe in HIV/AIDS prevention, champion HIV/AIDS prevention messages to youth audiences, and apply HIV/AIDS prevention in their own daily lives despite social pressures and other barriers that often inhibit condom use (Pearlman et al., 2002). Therefore drop-out is not uncommon and in fact is expected as part of the process. This study had a large drop-out rate in the peer educators between the pre-test (n=112) and post-test (n=69).

Voluntary behaviour with regards to HIV testing

According to Pettifor et al. (2004), HIV prevention services need to be readily accessible to young people in order to be effective and hence it is important to understand how young people wish to make use of these facilities. It is important for young people to be able to access health care facilities that provide quality and services that encourage usage (Stadler & Hlongwa, 2002). Although it is not an expressed aim of OIL's that students should come to them for a VCT, it is important to understand where their target group would prefer to go as it impacts on the service delivery of OIL. In terms of OIL's aims for their intervention, OIL aims to see both an increase in the amount of VCTs' as well as an increase in the use of clinics, and it can be observed in this study that there was no significant difference between either experimental group (peer educators) or control group from before to after the intervention in terms of encouraging them to go for VCT's.

Therefore OIL did not successfully encourage more people to be willing to go for a VCT. This result appears to indicate that students were already willing to go for VCT.

However, it is possible that, if the question had given an option of *I would prefer not to go for a VCT*, one would be able to more reliably conclude whether the students were in fact willing to go for VCT.

It is nevertheless important to note that the majority of youth in this community would rather go to a private doctor than any of the other options available. Most peer educators (experimental group) in the pre-test said they would choose to go to a private doctor for a VCT, followed closely by the choice of going to a local clinic. Likewise, in the control group sample, most students would choose to go to a private doctor, followed closely by the choice of going to a local clinic. This could impact the way in which the programme delivery and community targets youth in this area and could potentially save on wasting resources in trying to supply other means of VCT's. One of OIL's stated aims is to observe students using the clinic for VCT and treatments. However, based on the results from the present study, OIL should rather devise ways to assist their peer educators to go to private doctors for VCT or further investigate how to make the clinic a more favourable option.

VCT is a strategy that has been observed to reduce high risk behaviour, while increasing health seeking behaviours in adults (Pettifor et al., 2004) and is an fundamental part of many prevention programmes (Ginwalla et al., 2002). In their study Pettifor et al. investigated whether young people in South Africa had been tested for HIV. Twenty percent of the sample reported that they had never been and it was observed that females were significantly more likely to have had a test than males (25% for female, 15% for males, $p<0.01$). In addition to this, although so many had never been tested for HIV, 60% stated that they were interested in knowing their status, 28% stated they were not interested and 11% stated that they already knew their status (Pettifor et al.). Pettifor et al. noted a concern in that 27% of youth that had tested positive for HIV in their study, had stated that they did not wish to know their status.

Key components of most HIV prevention programmes appear to be around modifying risky sexual behaviour through a reduction of sexual partners, increased condom use, increased knowledge around HIV/AIDS and how to prevent infection, and improving attitudes towards infected people (Campbell & Foulis, 2002; Hope, 2003; Okonofua et

al., 2003; Perez & Dabis, 2003; Tapia-Aguirre et al., 2004) or even how peer educators process and communicate their message (Elford, Scherr, Bolding, Serle & Maguire, 2002; James, 2002; Ott *et al*, 2003). However there is not much research that outlines how to go about encouraging people to be tested and in fact is not an aim in the abovementioned studies.

In this study, students were asked whether they had been for a HIV test before. The hypothesis was that through the OIL intervention more students would go for an HIV test. However, it was observed that there was no significant difference in the experimental group (peer educators) from before to after the test in terms of going for an HIV test ($\chi 2=0.33$, $p=0.56$). In fact, of the peer educators, only 13 (11.71%) had been for an HIV test as opposed to the control group where 10 (12.35%, n=82) had been for an HIV test in the pre-test. In the post-test it was observed that 6 (9%) of the remaining peer educators had been for an HIV test and 11 of the control group had been for an HIV test. Therefore the OIL intervention had no effect on the behaviour of the students in terms of influencing them to be tested.

In South Africa a government project called Khomanani had an awareness campaign to encourage the diagnosis and treatment of STIs (Khomanani, n.d.). It is suggested that HIV/AIDS prevention techniques would most likely fail if participants do not internalise the attitude that knowing ones HIV status is important. The evidence of students believing this would be in more students going for VCTs. Unfortunately in this study students were not asked whether they felt that it was important to know their status or if they thought there was a chance they may be positive. Further investigation into these attitudes and whether they have gone for a test could provide interesting insights into reasons for students not going for a VCT. In addition, further study could investigate reasons students have for not going to be tested and this would in all probability highlight some of the stigma that exists around HIV/AIDS.

This study highlights that students in this community were willing to put a preference down of where they would be comfortable in going for a VCT, and whether they would disclose the information, both results showing to be favourable in terms of OILs aims; however, this does not correlate with students going for HIV test. Also it would seem that the OIL intervention did not significantly encourage students to actually go

for HIV tests, even though they may concede that it would be a responsible action. Potentially the lack of the option *I would prefer not to have a VCT* in the question impacted the validity of students' responses in this question. However findings here do seem consistent with other studies around desired knowledge and attitudes not relating to desired behaviours, (Campbell & Foulis, 2002; Hope, 2003; Okonofua et al., 2003; Perez & Dabis, 2003; Tapia-Aguirre et al., 2004). Therefore, in this case, the belief or attitude would be believing one should be tested and the related behaviour, being tested.

Disclosure

Interestingly, despite students not having gone for an HIV test, the majority of both the experimental group (89.86%) and the control group (87.5%) in the post-test stated that they would tell someone if the test were positive. This therefore indicates a willingness to disclose their status that is an aim of OIL's, but since most of the students did not go for a test, this needs to be examined further. There may be other factors that may be preventing them from going to have a test, such as lack of transport outside of their parents, being concerned around confidentiality of their doctor or local clinic, or that it is simply a low priority for them based on adolescents' natural tendency to thinking themselves invulnerable to the disease (Betts et al., 2003). This however would need to be investigated further to understand it completely.

When differences between schools and disclosure rates were tested in the pre-test, a significant difference was found between Schools B and D, and Schools C and D. When examining the experimental and control groups separately this significant difference remained between experimental groups at Schools B and D, but not control groups. This indicated that significantly more peer educators at School B would disclose their status than peer educators at School D.

Likewise significant differences remained when examining experimental groups at Schools C and D, but not between these control groups. Again this indicates that peer educators at School C were more likely to disclose their status than peer educators at School D. School D is categorised by OIL as being a predominantly Coloured school, while School B is a township school and School C is considered the most racially diverse school in the sample.

Therefore there may be some factors unique to School D that makes it significantly different from two of the other schools. This result indicates that there is room for further research into the contextual factors influencing the disclosure of HIV status. The different secondary schools in this community have very different economic and social contexts (OIL, 2004) and therefore the fact that there are differences between schools in an important finding. However, as this study was not examining these factors, it is difficult to conclude anything concrete from these findings, other than the recommendation that further study should be done in this area.

In the post-test it was observed that 92.31% of School C and 83.33% of School D's peer educators stated that they would tell someone if their test were positive. Therefore it would seem that peer educators of the OIL programme at School D were more likely to disclose their status after the intervention than peer educators at School C. However, post the intervention there was no significant difference between the groups from different schools and this could indicate that students at School D therefore increased their likelihood of disclosing their status after the intervention.

Peer education theory would advocate that students would most likely confide in their fellow peers and this is the foundation for disseminating information and thus peer education (Hunter, 2004; OIL, 2003; Brieger et al., 2001). Therefore a supposition would be that students would be most likely to inform their peers of their status if it were positive. In their study of West African youth Brieger et al. asked respondents to select from among 7 choices (parents, friends, older siblings, teachers, health workers, religious leaders, and indigenous healers) with whom they would feel most comfortable discussing 11 issues related to sexuality and reproductive health. It was found consistently with both genders that friends were most often chosen as first, then health workers next and third parents.

OIL did not outline who they would prefer students to disclose information to, although due to the nature of peer education it can be assumed that disclosure to friends is an important aspect as it is the foundation of peer education (Hunter, 2004;

OIL, 2003, Brieger et al., 2001). In the present study, more students in both the control group and the peer educator groups stated that they would tell their friends.

This was consistent across schools and in both the pre-test and the post-test. Of the peer educators, 46.23% in the pre-test and 42.03% in the post-test stated that they would disclose their status to a friend, while only 31.13% in the pre-test and 31.88% in the post-test would tell their family. In the control group 39.02% in the pre-test and 37.50% in the post-test stated that they would disclose their positive status to a friend, while 30.49% in the pre-test and 28.57% in the post-test would tell their family.

However again it was observed that there were no significant differences between the pre- and post-intervention results in terms of disclosure, again indicating that in the first phase of OILs peer education intervention has not had a significant impact on the students. In addition, teachers and partners would be important for disclosure as teachers are part of the schooling system, which has been described as one of the most effective HIV intervention sites (Perez & Dabis, 2003) and partners would be important as they would either have the HIV infection or be at risk of contracting it if their partners tested positive. Findings around disclosure to teachers and partners will therefore now be discussed.

It was observed in this study that overall most students would not inform a teacher if they had a positive HIV status. There was a significant difference observed in the pre-test between Schools A and C, and C and D in terms of willingness to disclose their status to a teacher. Students at School C were more likely to inform a teacher if their test result was positive, than Schools A and D. When the experimental group and control group were analysed separately, this significant difference remained between experimental groups between Schools A and C with no significant difference evident between the control groups from these schools. No significant difference was observed between either group from Schools C and D.

In the post-test there were no significant differences observed between any of these groups and based on the results, it is concluded that after the intervention less people in School C were willing to inform their teacher about their status. It could be that after the intervention students either had heightened awareness around the social stigma that may be associated with having HIV and therefore realised that they most likely would not wish to disclose their status to their teacher, or potentially, relationships with their teachers changed from the beginning of the school year to the

end. Therefore reasons for the change could vary and are not conclusive from this study.

Therefore, there is scope for further study to be done around what would encourage students to increase their disclosure to teachers as schools have been identified as important HIV intervention sites (Perez & Dabis, 2003) and thus every effort should be made at this level to ensure students are able to receive adequate assistance in the area of HIV and sexuality. Studies have shown that one of the contextual factors helping peer education interventions at a school level is developing the teachers' confidence levels in terms of discussing sex with students (Johnson, Vergnani & Chopra, 2002, as cited in Campbell & Foulis, 2002).

The most significant result observed was the *other* option. In the pre-test there were only five options given (*family, teacher, pastor, friend and other*) whereas in the post-test a sixth option was included (*boyfriend/girlfriend*) and for the analysis these results were included in the *other* category as students who had used the *other* option in the pre-test had all specified they would inform their boyfriend or girlfriend. However, because this was now a specific option, it is likely that this is the reason that more students opted for this option in the post-test, than because of the OIL intervention. This therefore renders making assumptions about the OIL intervention in terms of disclosure to one's partner useless.

It is interesting to note that in the post-test, 39.13% of the peer educators group and 44.64% of the control group stated that they would disclose their status to their partner. This result is of concern, as OIL (2004) has outlined that decreasing multiple partners is a priority as it is a problem in this community.

Therefore, if 58.08% of the entire sample in this community felt that they would not disclose their status to their partner if it were positive this would have far reaching ramifications to the spread of HIV in this community. When observing the frequencies of disclosure to ones boyfriend/girlfriend in the post-test in the different schools it is observed that School D had the lowest score for intention to disclose status to ones partner (25%); School A and School B were 38.89% and 48% respectively in terms of intention to disclose status to ones partner, while School C was

highest with 50%. This is linked to Campbell and McPhail's (2002) argument that successful interventions need students to be engaged in critical thinking and it is this critical thinking that will mean that students would realise the impact of HIV and what not disclosing information could mean to the people around them.

An effective peer education programme needs to determine the specific issues of a particular target group and the resources available to meet those needs in order to plan the most suitable intervention (Cowie & Wallace, 2000; Walker & Avis, 1999, as cited in Devillya et al., 2004). It is therefore important to understand contextual factors as they are instrumental in either increasing or decreasing adolescent risk of exposure to HIV (Stadler & Hlongwa, 2002). Therefore, it is important for a deeper understanding to be attained regarding contextual factors affecting the lack of VCT and disclosure that is occurring at the grassroots community level.

Stigma

One of the stated aims of OIL is to decrease the amount of stigma attached to HIV/AIDS. Students were asked in the baseline questionnaire if they thought their feelings would change for a friend who disclosed to them that they were HIV positive. The students were also asked how their feelings would change because, although feelings may change towards a friend who disclosed a positive HIV status, this is not necessarily reflective of stigma.

Although there was no significant difference in either groups from before to after the intervention it was observed in the pre-test that 81.99% of the experiment group and 71.6% of the control maintained that their feelings would change. In the post-test 73.13% of peer educators and 76.36% of the control group stated that their feelings would change. There was a significant difference found between the experimental groups from Schools B and D, without a significant difference between the control groups from these schools. Results indicated that 41.18% of peer educators at School B and no peer educators at School D stated their feelings for a friend would change. Likewise there was a significant difference observed between the experimental groups from Schools C and D in the post-test, where 30.77% at School C and none at school D felt their feelings for an HIV positive friend would change.

As to how these feelings would change, very few students in either the experimental group or control groups felt they would be afraid of becoming infected by their HIV positive friend. In the pre-test, 60% of peer educators and 73.68% of the control group indicated they would feel sad for their friend. In the post-test, 64.1% of peer educators and 67.4% of the control group felt that they would feel sad for their friend. This is interesting as it would be assumed that the peer educators should be more aware of the consequences facing friends who are HIV positive; however the control group seemed more likely to feel sadness for a HIV positive friend. This perception should be investigated further to better understand why peer educators are less likely to feel sad for their friends, than the control group.

One option is that as peer educators are chosen by their peers for their ability to act as change agents and leaders, they may not be able to conceive that their friends would test positive. Another idea is that peer educators need to be more assertive and this may possibly relate to less feelings of compassion for friends who disclose a positive HIV status. Also there may be a phenomenon occurring where peer educators see their friends as having a similar invincibility to themselves (Betts et al., 2003). There is no evidence from the current study to back this up and therefore it would need to be investigated further to understand whether the levels of invincibility that young people seem to experience are projected onto their peers.

Few of the students in either groups in the pre- or post-tests felt that they would feel angry at their friend for behaving irresponsibly. Again this would need to be investigated further as it is not clear from this study what students would consider *acting irresponsibly*.

Many students indicated that they would feel *no different* if their friend were positive and that they would support them if they had a positive status. However, as students could indicate more than one answer it is possible that this question was answered based on the phrase "he/she is my friend and you will support him/her", more than the part of feeling "no different". This is supported by the fact that students, who put this option down, also indicated other feelings in the same question. Therefore further study would be needed to investigate the feelings students would have around friends who disclosed a positive status to them.

In addition, there are other feelings that students could feel and these options most likely do not cover them. Although there was an *other* option given, however very few students chose this option. A more qualitative look at this area of discussion would most likely yield more insightful findings.

Knowledge

The four questions around knowledge asked true/false questions around the subject of HIV/AIDS (See Questions 1-4, Appendix C). These were not the only questions that tested students' knowledge; however, due to these questions being changed by OIL from the pre-test to the post-test the results are no longer comparable and therefore were omitted in the analysis to ensure validity.

In the pre-test it was observed that people were more likely to get three or more of the questions correct, and neither the control group nor the peer educators tended to get all the knowledge questions incorrect. This is an encouraging result as students therefore demonstrate a relatively sound knowledge around HIV/AIDS and the truth about some of the cultural myths of HIV/AIDS. In addition to this there were some significant differences observed between the control groups from Schools A and C, and the experimental groups from Schools C and D. Again the demographics of School C are one of being the most culturally diverse, whereas School A consists of predominately middle income white suburban students. These results reflect that students at School C were significantly less likely to get all the knowledge questions correct when compared to Schools A and D. One could speculate that this therefore means that the context of the school impacts on programme delivery and therefore OIL would need to further observe how the different school contexts impact on the success of programme delivery. Again, as this is out of the scope of the present study it is difficult to make conclusive deductions around the contexts of the school and its impact on programme delivery.

There was no significant difference between the control group and the experimental group either in the pre-test or in the post-test in terms of knowledge. In the post-test it was observed that 59.42% of the experimental group and 51.79% of the control group answered all the knowledge questions correctly. However, there was a significant difference observed between both the experimental groups from Schools A and C, and

between the control groups at Schools A and C. There was also a significant difference between the experimental groups from Schools C and D. More students at School A got all the answers correct than at School C in the post-test, however more peer educators at School C got three of the four questions correct than School A. When differences were investigated between which questions students got mostly correct or incorrect it was interesting to note that the question that most of the peer educators got Question 2 (Appendix C) incorrect in the pre-test, which asked whether all STIs' could be cured. The most correctly answered question for this group was Question 4 (Appendix C), which asked whether a HIV positive man who had sex with a virgin would be cured. The question around the importance of counselling prior to having an HIV test (Question 3, Appendix C) had the most incorrect answers for the control group in the pre-test, while the most correct answers in this group was for Question 4 (Appendix C). The post-test indicated that the experimental group still got Question 2 the most incorrect and Question 4 the most correct, while the control group now got Question 2 most incorrect and Question 4 most correct.

It would seem that the intervention did not make an impact on the knowledge levels of the peer educators. However, as there were only four questions that could be evaluated, this decreases the validity of this result and it is therefore difficult to conclude whether the OIL intervention statistically made an impact on the knowledge of the peer educators. However, the frequency of correct and incorrect answers can assist the understanding of OIL as to where knowledge is lacking. Again the main differences are evident between the schools and therefore contextual factors may play a role in determining levels of HIV education and this would need to be better understood by OIL for more effective programme delivery.

The relationship between condom usage and knowledge

Condoms play an important role in the reducing of risk of HIV infection and therefore there are increasingly more studies on the use of condoms (Betts et al., 2003). This is true of the present study and therefore this study investigated the relationship between knowledge and the use of condoms. Harrison et al. (2001) discussed safe sex behaviour with student peer educators (girls aged 14-15 and boys aged 16-19) and found that boys were less likely to perceive themselves at risk and more likely to use condoms, while girls feared HIV/AIDS and pregnancy and would prefer to delay

sexual relationships and did not tend to use condoms in sexual intercourse. Both genders thought of condoms favourably, but both also agreed that it was difficult for girls to negotiate condom usage. Girls tended to view condoms as a sign of love and protection, while boys tended to use them with casual partners (Harrison et al.).

It is thought that knowledge is not directly correlated with condom use among young women, and therefore prevention strategies need to deal with social acceptability of condoms and social skills related with condom negotiation are also needed (Tapia-Aguirre et al., 2004). An argument could be made that if both individuals are in a committed relationship then there would be no need for the use of a condom. This could mean that again the use of condoms in a relationship brings the issue of trust into that relationship and therefore has nothing to do with the social acceptability of trust or condom negotiation. In fact, despite literature around gender issues complicating the condom negotiation process in South Africa (Campbell & Foulis, 2002; Campbell & McPhail, 2002), in Brazil it was observed that there was an increased use of condoms for males with high levels of knowledge and a decreased use of condoms for females with high levels of knowledge. This could indicate that males, being more aware of lower commitment levels in terms of having one sexual partner and understanding the risk, are more likely to want to use condoms.

Campbell and McPhail (2002) state that it is ironic that issues such as love and trust undermine the use of condoms. This result could be reflective of the situation in South Africa as well as Brazil and therefore there is scope for further analysis into the gender dynamics and levels of knowledge amongst youth in South Africa. This is particularly relevant as studies have indicated that females who are exposed to HIV are at twice the risk of contracting the virus as males and in parts of sub-Saharan Africa females are up to six times more likely to be infected than males (WHO, 2004).

In the present study it was observed that males were more likely to use a condom every time they had sex than females in the pre-test experimental group. This could indicate that males are more able to negotiate the use of condoms in their sexual encounters than females, which theory advocates is true (Campbell & Foulis, 2002; Campbell & McPhail, 2003). In the post-test there was no significant difference observed between the use of condoms and gender in the experimental or control

groups. However, it was observed that the percentage of males who claimed to always use a condom when having sex in the experimental group decreased from the pre-test to the post-test, while the percentage of experimental group females increased in their claim to always use condoms when having sex.

Attitudes

There are many theories that advocate that attitudes, beliefs, and/or intentions are proximal determinants of behaviour and therefore changes in attitudes are viewed as an important goal in many HIV/AIDS prevention programmes and intentions to engage in low-risk behaviours are often taken as a sufficient indicator of subsequent behaviour (Gallant & Maticka-Tyndale, 2004). Betts et al. (2003) have identified from various studies some individual and social characteristics that increase HIV risk among adolescents in Africa: multiple partnerships, perceived self-efficacy to use condoms, general non-use or inconsistent use of condoms, perceived risk of infection, and the tendency to feel physically and psychologically invulnerable. Gallant and Maticka-Tyndale's evaluation of HIV/AIDS intervention programmes provide some evidence that attitudes toward people living with HIV/AIDS, self-efficacy with respect to both condom use and abstinence and, on occasion, intentions to abstain and to use condoms can be changed with school-based programmes.

In the present study there were only three questions included in the table referring to the students' attitudes and beliefs that may contribute to their risk for HIV. The first two were true/false queries around their beliefs about sex and relationships (see Questions 14-15, Appendix C), while the third question referred to abstinence (see Question 18, Appendix C). It was observed in both the pre-test and the post-test that most people in the peer educators group and the control group showed either all three desired attitudes or two of them. Very few students in either the pre-test or the post-test showed none or only one of the desired attitudes.

This may be an encouraging result but it is more likely an indication that there should have been more questions around attitudes (Gallant & Maticka-Tyndale, 2004). In addition, there is a tendency for participants doing self-reported evaluations on sexual behaviour data to be reluctant to reveal attitudes towards their sexual activity and therefore may tend toward socially acceptable responses (Catania, Gibson, Chitwood

& Coates, 1990, as cited in Pearlman et al., 2002), therefore giving inaccurate responses.

One of the goals of OIL (2004) was to see youth engaging in more meaningful relationships with their partners. The majority of students from both the experimental and control groups in both the pre and the post test disagreed with the notion that one needs to be having sex in a relationship in order to have be fulfilled in the relationship (Question 15, Appendix C). The rationale for this is that if students believe that they can have meaningful relationships without having sex they are more likely to abstain from sex. Therefore the result for this attitude is encouraging.

In addition to this, OIL (2004) desires to see more students abstaining from sexual intercourse; however, this was reflected as the most common undesired attitude for both groups in the pre and post-test. Gallant and Maticka-Tyndale (2004) found that attitudes toward abstention and towards condoms, and perceptions of one's own risk or susceptibility showed less optimistic results than results around other attitudes (such as towards people living with HIV/AIDS). In all their HIV programmes, attitudes toward abstinence and condoms were low at baseline and remained low in the follow-up. They postulated several possible interpretations where perhaps when faced with high rates of HIV infection and information about self-protection, people intend to use condoms even if they do not like them. Gallant and Maticka-Tyndale also suggest that the measure of intentions may be more subject to social desirability biases and unreliability if measured with a single item. This is consistent with other research findings (Catania et al., as cited in Pearlman et al.).

Therefore it is possible that the amount of positive responses from the present study with regard to attitudes may reflect the social desirable biases associated with HIV/AIDS attitudes and may not be a true reflection of the students' attitudes.

Further study would need to be done to investigate whether this is occurring in this target group with other items investigating attitudes. However the majority of students also indicated that they had not had sex yet and this is also a very encouraging result that is consistent with the reflected attitude.

The next section formed the largest part of the survey and the results from both the knowledge and the attitudes sections relate to the behaviours, especially with regard to potential relationships between knowledge and attitude variables with behaviour.

Behaviour

Gallant and Maticka-Tyndale (2004) maintain that the fundamental goal of all interventions would be to affect a change in the behaviour of youth in a direction that would decrease their risk of HIV infection. Young people and especially women in South Africa are at high risk with regards to HIVAIDS as a result of an apparent gap between awareness and practice (Harrison et al., 2001). In order to develop effective HIV prevention programmes, factors associated with risk behaviour among populations in which HIV incidence rates continue to rise must be identified (Sikkema et al, 2004).

The questions for this section investigated the behaviours of the students taking part in this study (see Questions 9, and 19-23, Appendix C). The results showed that very few students demonstrated all six desired behaviours in either the peer educators group or the control group and this result was consistent in both the pre-test and the post-test. This therefore supports literature both around knowledge not necessarily relating to desired behaviours and also the possibility that students did not necessarily answer the attitude questions completely honestly (Catania et al., 1990, as cited in Pearlman et al., 2002) or that having the desired attitudes do not necessarily relate to desired behaviours (Campbell, 1997). Most students claimed that they demonstrate either 3 or 4 of the 6 desired behaviours.

In both the pre and post-test experimental groups the highest desired attitude reflected was in response to question 15 (*To be fulfilled in a relationship you must be having sex*). Therefore, both groups indicated that they did not believe that one needs to be having sex to be fulfilled in a relationship. Interestingly it did not make a difference to the result when observing schools separately. This is important, as there is a perception around certain communities and gender differences impacting on individuals' beliefs around sex and relationships (Campbell & MacPhail, 2002).

Both groups also indicated their most undesired attitude was to Question 18 (*Have you decided to wait to have sex until a later stage?*). Therefore, both groups indicated that they had decided not to wait until later to have sex. This is hardly surprising at this age group (Stadler & Hlongwa, 2002). However OIL has indicated that they consider it an undesired behaviour and would like to see an increase in abstinence and therefore this is a result that would need to be better addressed in their programme as it would seem that there was no significant difference in either group from before to after the intervention. Although, the majority of both groups had indicated that they were waiting for a later stage to have sex.

Although accurate knowledge is necessary for effective HIV prevention, studies have shown that South African youth with accurate knowledge often do not act on this information when making decisions regarding their sexuality and health (Campbell et al., 2005). Therefore although these students demonstrate good levels of knowledge around HIV/AIDS, this study demonstrates that it has not necessarily led to a change in behaviour.

Relationship between having more than one sexual partner and condom usage

While awareness and communication can result in behaviour change, shifts in health seeking behaviour also need to occur (Stadler & Hlongwa, 2002). This next section discusses the relationships between two behaviours. It is thought that some of the behaviours are high risk behaviours for contracting HIV and this section looks at whether students engaging in one of these high risk behaviours (having more than one sexual partner) are also engaging in healthy behaviours (such as using condoms every time they have sex). There was a significant difference in the pre-test experimental group in terms of condom usage in every sexual encounter and having more than one sexual partner. Students who had more than one sexual partner were more likely to use a condom in every sexual encounter, than those students who did not have more than one sexual partner.

This result was also significant in the post-test experimental group indicating that students who had more than one sexual partner were more likely to use a condom than those students who did not have more than one sexual partner. There was no significant difference observed in the control group in either the pre-test or the post-

test. This is therefore a very encouraging result as it means that the OIL intervention has had an impact on peer educators' use of condoms when engaging in high risk behaviour. It also means that there is less of a risk of spread of HIV/AIDS as individuals engaging in multiple partners are using condoms every time they have sex. This is important as OIL (2004) outlined that in this particular community multiple partners is a serious issue, and one of the stipulated aims of OIL was to reduce the amount of multiple partners and increase condom usage. Although this study does not indicate a significant decrease in multiple partners, it has demonstrated that OIL has encouraged individuals with more than one sexual partner to use a condom in every sexual encounter.

The next section discusses the relationship between some of the attitudes students have around HIV/AIDS and sexual behaviour.

Relationship between attitudes and behaviours

Relationship of the perception of risk and having had sex

There was no significant difference observed between students' perception of risk and having had sex in either the experimental group or the control group in the pre-test and the post-test. Only 30% of the post-test peer educators who had had sex perceived themselves to be at risk of contracting HIV compared to 35.7% of the post-test control group who had had sex. This means therefore, that a large proportion of students who are engaging in sexual behaviour do not perceive themselves to be at risk of contracting HIV.

This is a concerning finding, although it is in line with literature around teenagers having a belief of invincibility (Elkind, 1970, as cited in Elliot & Lambourn, 1999). Peer education has been outlined as a strategy to target this perception (Aggleton & Campbell, 2000; Elliot & Lambourn; MacPhail & Campbell, 2001). However there has been no significant difference observed in the peer educators in terms of their perception of risk impacting on their behaviour, and in fact there was no significant increase in perception of risk amongst the peer educators as a result of the OIL intervention, despite students engaging in sexual behaviour. Perceptions of personal risk or susceptibility appear to be the most difficult to change (Gallant & Maticka-Tyndale, 2004).

This is a particular problem for South Africa as there are high levels of HIV amongst young people despite documented high levels of HIV knowledge about sexual health risks (Campbell & McPhail, 2002). OIL has stated that they aim to target this issue; however, this study indicates that the OIL intervention has not impacted on the students in this area. This is not surprising given the challenging nature of targeting these beliefs (Bandura, 1994, as cited in Elliot & Lambourn). However this would need to be addressed by OIL in their further interventions in this community.

Relationship between the perception of risk and sexual behaviour

Despite many years of public prevention campaigns, there is a pronounced gap evident between high awareness of sexual risk and the practice of safe sex behaviour (Galloway, 1999, as cited in Harrison et al., 2001). The results of the study indicated that of all the students in the pre-test who believed that they are at risk of contracting HIV/AIDS, 35.48% always use a condom, while 40.26% of people who do not feel they are at risk, always use a condom.

Despite there being no significant difference between the groups, it was observed that about half of the peer educators who perceived themselves at risk of contracting HIV/AIDS use a condom every time they had sex. The control group's result was very similar. In the post-test 30% of peer educators believed that they could be at risk of contracting HIV/AIDS, while 70% did not perceive themselves to be at risk. It is possible that the reason that individuals do not feel that they are at risk of contracting HIV is because they use condoms every time they have sex. When answering the questionnaire, individuals who do not always use a condom were thus more likely to answer that they were at risk of HIV than individuals who always use a condom. It is therefore difficult to make any assumptions about this result in terms of OILs goals.

Specifically, of the 24 peer educators who believed they were at risk, 75% stated that they always use a condom in the post-test and therefore this increased from the pre-test. In the control group, 72% of students who believed they may be at risk stated that they used a condom every time they had sex.

There is also the possibility that the drop out of so many peer educators, although expected (Pearlman et al., 2002), may have changed the demographics of the students and the diversity of responses. In other words, the remaining peer educators may be considered the more committed students and therefore were the original students showing desired behaviours. Therefore the observed increase of students using a condom every time they have sex may have nothing to do with the intervention, especially considering the similar increase in the control group, but rather could reflect the experimental group's original beliefs and behaviours now without students with differing beliefs and behaviours.

In a school-based study in Mexico (Tapia-Aguirre et al., 2004), students knew more concerning HIV transmission than about prevention of HIV infection and among the men, high levels of HIV/AIDS knowledge increased the likelihood of condom usage while among women high levels of knowledge decreased the likelihood of condom usage. However, young men with high levels of knowledge were more likely to have more than one sexual partner, while young women with high levels of knowledge tended to have one lifetime partner. This would make sense then as women who are in a committed relationship would most likely not see a reason to use condoms, despite having a high knowledge around HIV/AIDS. In the present study there was a significant difference found between the use of condoms and gender in the pre-test indicating that male students were more likely to use a condom every time they had sex, than females.

This could be explained by the Mexican study (Tapia-Aguirre et al., 2004) in that if women view themselves to be in a committed monogamous relationship it is understandable that they may not feel the need for condoms when having sex, while males who have more than one sexual partner would see a need for condoms. This present study is inconclusive in this regard and further investigation would need to be made to better understand if this in fact is a phenomenon in this community. There was no significant difference observed in the post-test with regards to condom usage and gender in this study and over 50% of both males and females in the experimental group stated that they did not use a condom every time they had sex. This result is of concern and therefore OIL would need to target this behaviour more effectively to ensure that HIV is curbed in this community.

Concluding Remarks

Pearlman et al. (2002) evaluated the impact of a community-based HIV/AIDS peer-education programme on newly enrolled peer educators and peer educators who had enrolled for one or more years. They found that over a 9-month period newly enrolled peer educators had significantly higher scores for HIV/AIDS knowledge and perception of one's self as a change agent in the community than the comparison group and on all baseline outcome measures except risk-taking behaviours, the repeat peer educators reported higher scores than newly enrolled peer leaders. Therefore Pearlman et al. concluded that post-intervention, HIV/AIDS knowledge continued to increase significantly more among repeat peer educators compared with the new peer educators.

In this study, overall it can be seen that the OIL intervention has not made a big impact on the knowledge, attitudes or behaviours of the peer educators who were tested in this study. However, some interesting findings have been highlighted that can assist OIL in the further implementation of their intervention and in the programme delivery. It is important to remember that this study observed the effectiveness of the first stage of the OIL programme and has not examined the effectiveness over all three years. The second and third years build on the foundation of the first year (OIL, 2004) and therefore this study has tested the effectiveness of this stage. However, some changes may take longer and therefore the lack of attitude and behaviour change in the first stage of OIL may not be an accurate reflection on OIL's intervention.

CHAPTER SIX - LIMITATIONS AND RECOMMENDATIONS

Although expected, in this study there was a high drop-out rate of peer educators during the course of the Track 1 programme. Studies have advocated that those who dropped out of the programme may have thought of the peer education training as beneficial, but the programme compensation may have been insufficient to keep them in the programme (Pearlman et al., 2002). This is particularly true of school students who need to maintain their studies and other extra-curricular pressures on top of the responsibilities associated with being a peer educator.

Peer educators are individuals that are identified as student leaders and change-agents (OIL, 2004) and therefore it is assumed that they would have other responsibilities and be most likely be diligent academic students. This could have impacted the drop out rate of peer educators from the pre to the post-test and although this is to be expected this may have had a negative impact on the accuracy of these results. Future studies should investigate reasons around drop out rates of peer educators and how this impacts the reliability of the results. In addition investigations could also be done into the reasons behind students not going for HIV tests and the stigma associated with this, as well as the contextual factors that may influence the level of disclosure of status.

As with all evaluations that rely on self-reported sexual behaviour data, there is a possibility that the students may have been reluctant to reveal information about their sexual activity and may have tended toward socially acceptable responses therefore giving inaccurate responses (Catania et al., 1990, as cited in Pearlman et al., 2002). This study outlined the issue around social desirability influencing students' responses; however, it would need to be further investigated to understand how much it impacts on the evaluation process of secondary school peer education programmes.

There is a possibility of diffusion of intervention information from intervention youth to control youth (Fitzgerald et al., 1999). As this is a threat to validity, it is usually seen as limitation to research, however as this is the aim of peer education, and could be one explanation of significant differences found in the pre-test, no longer being in the post-test, it is not necessarily a limitation for the present study. However, this hypothesis is not conclusive from the results of this study and would therefore need to

be investigated further. Further steps could be taken in a study on the effectiveness of peer education programmes to study the peers of the peer educators, to investigate whether they have received information from the peer educators, or if they feel their attitudes or behaviours have been impacted as a result of being friends with a peer educator.

The issues around the changes made to the post-test by OIL without the researchers knowledge also impacted negatively on the amount of reliable information that could be used. This was especially relevant for the *other* section in the question around who students would tell if their HIV test were positive. This could have been avoided if there had been more consultation with the researcher by OIL in the design process and in terms of making changes to the questionnaire. Due to these limitations there is room for similar studies on this target group with a more detailed questionnaire that investigates knowledge, attitudes, and behaviours more thoroughly.

This study investigated the effectiveness of OIL's Track 1 programme in targeting knowledge, attitudes and behaviours that are related to HIV/AIDS. Findings indicate that there was marginal success in impacting students. However there is much that can be done to improve the programme delivery and this study has highlighted some of these areas. It is important to remember that while this study has focused on the first year of the OIL programme there are two more years and potentially a study that investigates changes over all the years will find much more meaningful results in terms of the effectiveness of OILs programme. Nevertheless the effectiveness of the programme has as a premise the effectiveness of the Track 1 year and therefore there is room for improvement in this regard.

Gender is outlined as a major contributor of issues within the prevention of HIV/AIDS, and although this study was not predominantly focused on this some of the findings indicated this to be relevant to this community and therefore there is room for study into the effect gender dynamics have on HIV/AIDS prevention programmes such as OIL. Linked to this, the present study found interesting relationship between attitudes and condom usage and gender and therefore this another area that could be further investigated.

CHAPTER SEVEN - CONCLUSION

This study has outlined the goals of OIL and the evaluation of the programme in achieving these goals. There was limited success found in Track 1, although there were many interesting findings around the beliefs and attitudes of the target group. These findings will assist OIL in improving their programme and therefore make it more effective in targeting the issues around HIV/AIDS at the school level.

HIV/AIDS demands a response from every sector; however, education has a particularly significant role to play ("Education and HIV/AIDS", 2002). According to Stadler and Hlongwa (2002) successful intervention for HIV/AIDS is in open communication about sex and early sex education. Prevention education remains the most fundamental method targeting the spread of HIV among youth (Pearlman *et al*, 2002). Achieving the goal of education for all in South Africa is becoming increasingly challenging in light of the epidemic facing communities and education ("Education and HIV/AIDS"). Interventions to promote sexual health will be more effective when they are directed toward youth at greatest risk and when they target psychological, social, and motivational characteristics that are related to high-risk sexual behaviour (Rotheram-Borus, Jemmot, Jemmott, 1995; DiClemente, 1990; Jemmott, Jemmott, & Fong, 1998, as cited in Sikemma et al., 2004).

Much work still remains to be done in developing school contexts that enable people to exercise real leadership of HIV-prevention programmes (Campbell & MacPhail, 2002). There is great need for organisations to be aware of these interventions that occurring at grassroots level and be contributing to the social capital needed for their success (Campbell and Foulis, 2002).

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Appendices

APPENDIX A: Information for OIL programme

(Adapted from OIL, 2004)

TRACK 2: After Track 1, peer educators are ready for Track 2. At this point a second group of 10-15% of grade 10 learners enter track one. If they successfully fulfil their peer educator roles within their first year, the first group (now grade 11, Track 2) are officially recognised by the school as OIL accredited peer educators. These peer educators are now called Track 2 and will have a minimum of 100 contact hours of training, supervision and support. Track 2 involves a more advanced curriculum, where peer educators are equipped with specialised skills and intensive knowledge to enable them to fulfil their expected roles at a deeper level. This curriculum includes developing leadership skills; formal lesson facilitation and group lead community upliftment projects and advocacy committees, as well as basic counselling skills.

TRACK 3: The first group (who are now grade 12) are called Track 3 and fulfil the additional role of "peer mentors" and as part of their role will mentor the new Track 1 and 2 peer educator groups. In Track 3, students receive a minimum of 50 contact hours of training, supervision and support.

TRACK 4: IN their fourth year, former peer educators may apply to join the NGO service provider, OIL, (or other community-based organization in partnership or relationship with OIL) and register for a learnership as a "youth worker" that will result in a M+1 (Gr. 12+1) qualification. They are able to take over the role of the original facilitators, and as a result ensure continuity (and sustainability at a now reduced cost). The NGO facilitation team is therefore made up of both former peer educators and NGO adult supervisors. This year could be in the form of a part time or full time year programme. OIL will provide support to Primary schools through the learnership track facilitators. A less formal volunteer programme will also be included for past peer educators to remain involved with the Peer Education Model.

COMMUNITY SUPPORT PROGRAMME: Consists of ongoing activities and events that support the training tracks and provide a context where the needs of peer educators and their peers can meet as well as providing a social context for relationship building and skills sharing across communities, cultures and tracks.

Some activities in the programme include:

Lube Lounge. Where OIL provides a regular forum where role models (celebrities, community and business leaders) of all backgrounds are invited to share their life stories with peer educators and their friends.

Media. OIL uses media (pamphlets, booklets, videos, manuals and a magazine) to support its training and expand its reach and peer education process.

Bursaries and education funds. To support peer educators in achieving their goals, OIL aims to create and work with education funds in order to remove the financial obstacles.

Counselling and Referral Base. Volunteer pre- and post-test HIV counselling and testing as well as counselling and referral on other teen related issues is provided by the OIL staff at a local clinic site as well as within the communities and at schools. There are support groups and personal growth groups available for peer educators and their friends who are in need of such services and referrals for professional help is provided through OIL through an established network of community based resources.

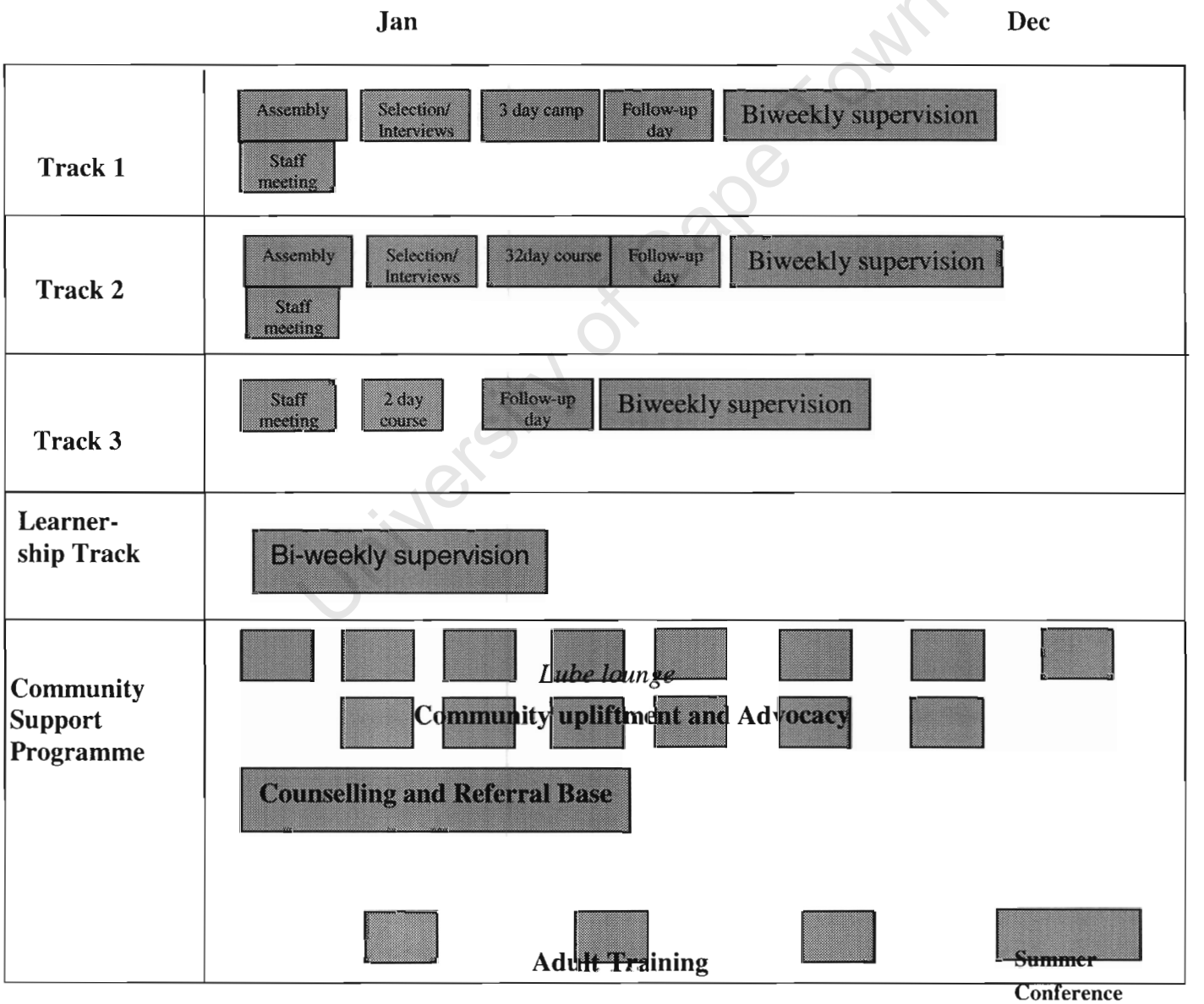
Adult Training. This includes running focus groups and training courses on values clarification and relevant adolescent life issues for teachers, parents, clinic staff, NGO's, youth leaders and community groups. OIL believes that peer education cannot be effective in isolation and must extend to working with adult role players. Three day teacher training for peer education sustainability is provided to support the tracks and ensure strong partnerships with OIL and the schools as well as values clarification for life orientation teachers within primary and secondary schools (in

partnership with Western Cape Education Department).

Three day nurses training on adolescent VCT and related issues is provided to ensure that service providers are adolescent friendly and accessible (in partnership with Department Of Health).

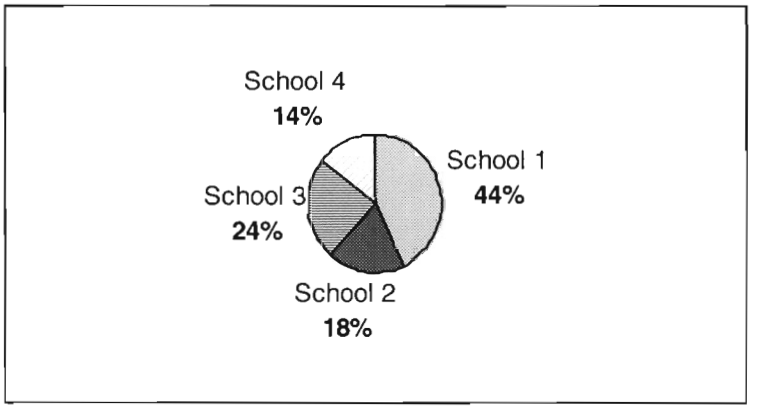
The follow diagramme is a summary of the OIL Track 1-4 programme as outlined above, with all the activities that OIL uses in its intervention.

OIL BEST PRACTICE MODEL

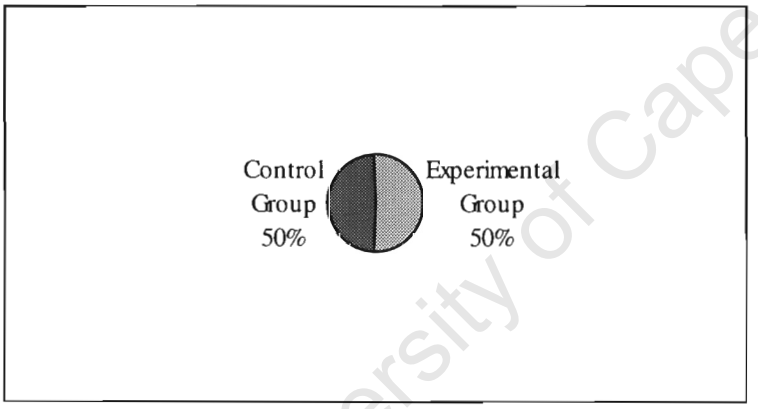


APPENDIX B: PIE CHARTS AND TABLES

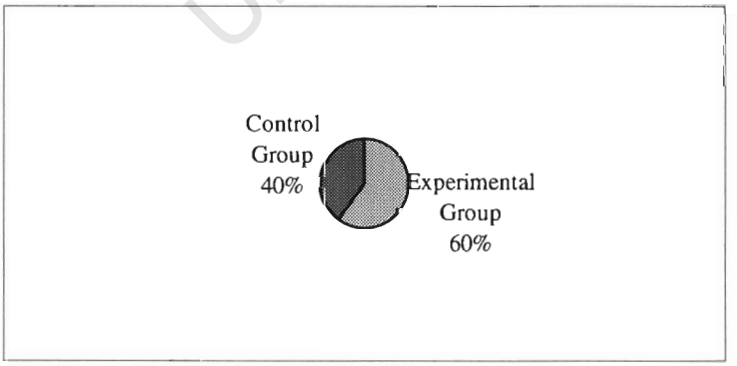
Pie Chart 1: Pre-Test-Schools



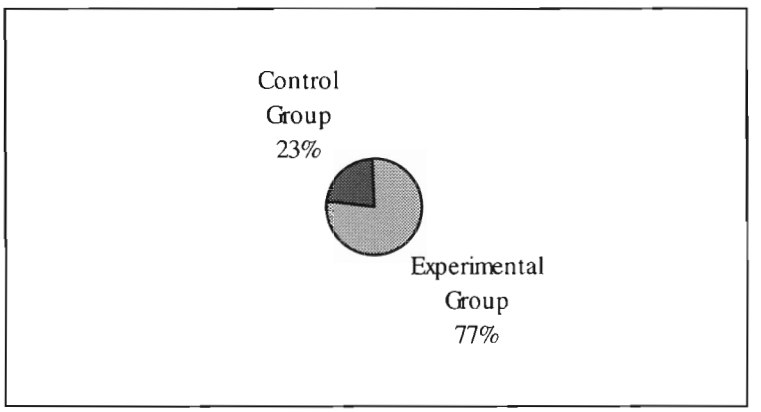
Pie Chart 2: School 1 – Control and Experimental Group (Pre-Test)



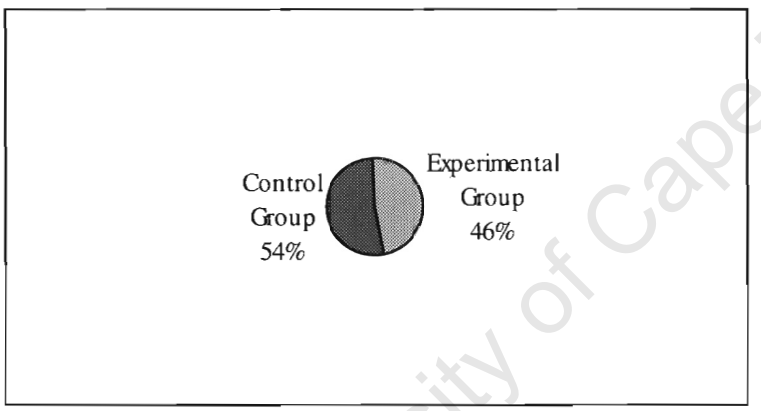
Pie Chart 3: School 2 – Control and Experimental Group (Pre-Test)



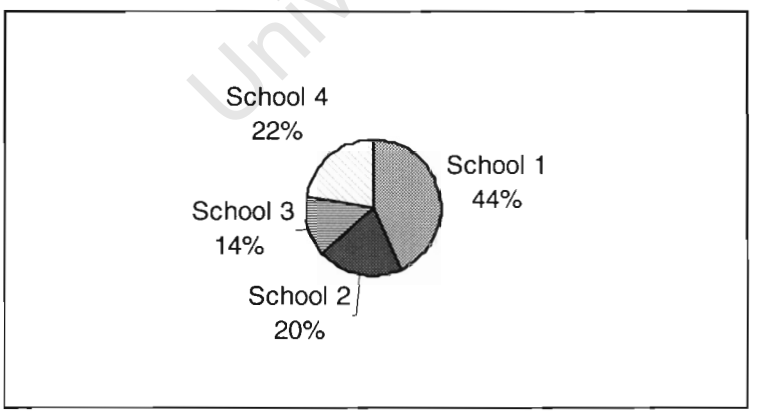
Pie Chart 4: School 3 – Control and Experimental Group (Pre-Test)



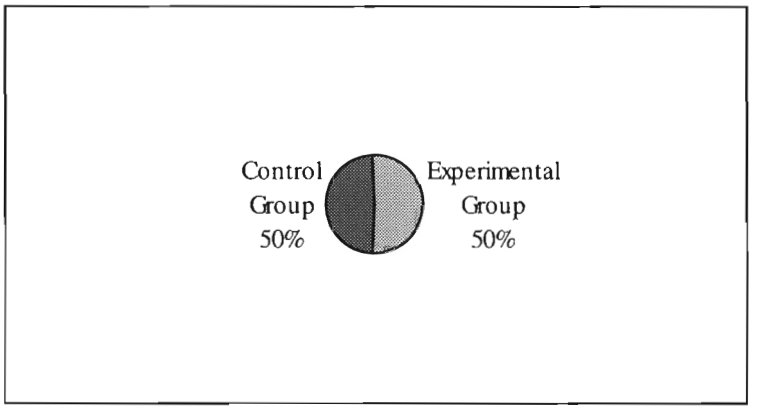
Pie Chart 5: School 4 – Control and Experimental Group (Pre-Test)



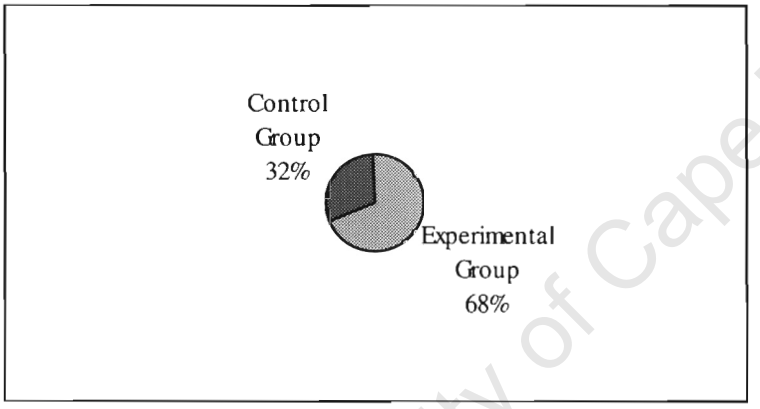
Pie Chart 6: Post-Test Schools



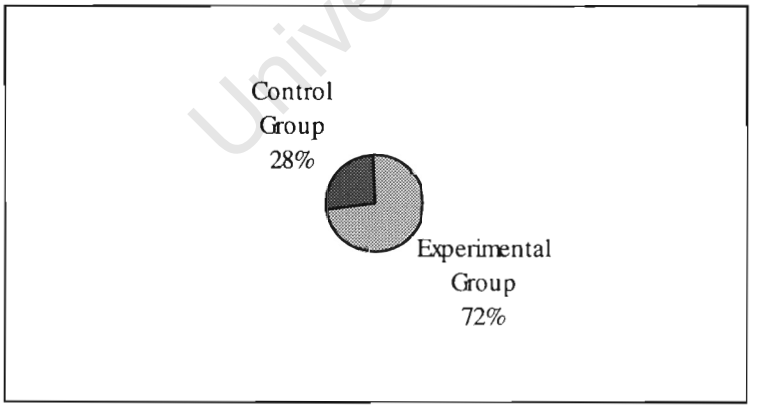
Pie Chart 7: School 1 – Control and Experimental Group (Post-Test)



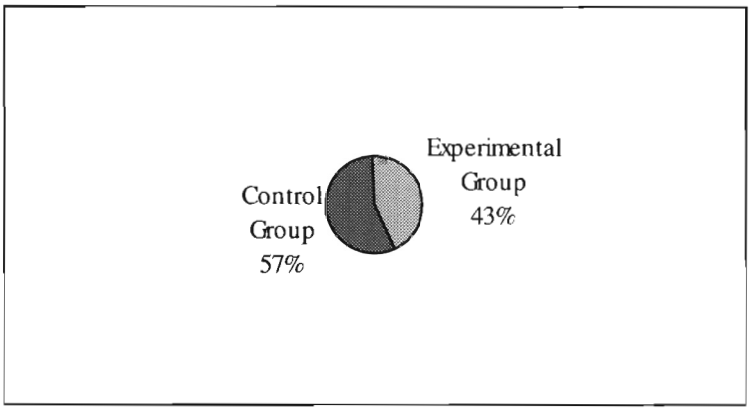
Pie Chart 8: School 2 – Control and Experimental Group (Post-Test)



Pie Chart 9: School 3 – Control and Experimental Group (Post-Test)



Pie Chart 10: School 4 – Control and Experimental Group (Post-Test)



Chi-square Tables

Tables indicating differences between control and experiment groups pre the intervention

Preferred place of testing

Pearson Chi-square: 2.58502, df=3, p=0.460126					
Group	**Local Clinic**	**Another Clinic**	**Private Dr**	**Other**	**Row**
Experiment	42.72165	12.70103	53.11340	3.463918	112.0000
Control	31.27835	9.29897	38.88660	2.536082	82.0000
All Groups	74.00000	22.00000	92.00000	6.000000	194.0000

Table B1 – Summary of expected frequencies (Pre-test)

Disclosure of test results

Pearson Chi-square: .108090, df=1, p=0.742330					
Group	**Tell? Yes**	**Tell? No**	**Row**	**Group**	**Tell? Yes**
Experiment	93.1710	17.82902	111.0000	Experiment	93.1710
Control	68.8290	13.17098	82.0000	Control	68.8290
All Groups	162.0000	31.00000	193.0000	All Groups	162.0000

Table B2 – Summary of expected frequencies (Pre-test)

Would students tell their family?

Pearson Chi-square: .008996, df=1, p=0.924437			
Group	**No**	**Yes**	**Row**
Experiment	32.70213	73.2979	106.0000
Control	25.29787	56.7021	82.0000
All Groups	58.00000	130.0000	188.0000

Table B3 – Summary of expected frequencies (Pre-test)

Family/tell?	Pre	Post	Row
Yes	33 (31.13%)	22 (31.88%)	55
No	73 (68.87%)	47 (68.12%)	120
All Groups	106	69	175

Table B4 – Summary of experimental group

Experimental Group Pearson Chi-square: .010966, df=1, p=0.916598			
Family/tell?	**Pre**	**Post**	**Row**
Yes	33.3143	21.68571	55.0000
No	72.6857	47.31429	120.0000
All Groups	106.0000	69.00000	175.0000

Table B5 – Summary of expected frequency

Family/tell?	Pre	Post	Row
Yes	25 (30.49%)	16 (28.57%)	41
No	57 (69.51%)	40 (71.43%)	97
All Groups	82	56	138

Table B6 – Summary of control group

Control Group Pearson Chi-square: .058518, df=1, p=0.808855			
Family/tell?	**Pre**	**Post**	**Row**
Yes	24.36232	16.63768	41.0000
No	57.63768	39.36232	97.0000
All Groups	82.00000	56.00000	138.0000

Table B7 – Summary of expected frequency

Would students tell a teacher?

Pearson Chi-square: 1.08762, df=1, p=0.297003			
Group	**No**	**Yes**	**Row**
Experiment	96.9787	9.02128	106.0000
Control	75.0213	6.97872	82.0000
All Groups	172.0000	16.0000	188.0000

Table B8 – Summary of expected frequencies (Pre-test)

Would students tell their pastor?

Pearson Chi-square: 1.01661, df=1, p=0.313327			
Group	**No**	**Yes**	**Row**
Experiment	94.1596	11.84043	106.0000
Control	72.8404	9.15957	82.0000
All Groups	167.0000	21.00000	188.0000

Table B9 – Summary of expected frequencies (Pre-test)

Would students tell a friend?

Pearson Chi-square: .977953, df=1, p=0.322707			
Group	**No**	**Yes**	**Row**
Experiment	60.3298	45.67021	106.0000
Control	46.6702	35.32979	82.0000
All Groups	107.0000	81.00000	188.0000

Table B10 – Summary of expected frequencies (Pre-test)

Would students tell someone else (other)?

Pearson Chi-square: .712439, df=1, p=0.398637			
Group	**No**	**Yes**	**Row**
Experiment	93.7701	11.22995	105.0000
Control	73.2299	8.77005	82.0000
All Groups	167.0000	20.00000	187.0000

Table B11 – Summary of expected frequencies (Pre-test)

If a friend told you they were HIV positive, do you think your feelings for them would change?

Pearson Chi-square: 3.76871, df=1, p=.052223			
Group	**No**	**Yes**	**Row**
Experiment	12.27679	42.72321	55.0000
Control	12.72321	44.27679	57.0000
All Groups	25.00000	87.00000	112.0000

Table B12 – Summary of expected frequencies (Pre-test)

Chi-square test tables

Where would students go for a VCT?

Pre/Post	Local Clinic	Another Clinic	Private Dr	Other	Row
Pre/Exp	40 (35.71%)	16 (14.29%)	53 (47.32%)	3 (2.68%)	112
Post/Exp	25 (36.76%)	12 (17.65%)	26 (38.24%)	5 (7.35%)	68
All Groups	65	28	79	8	180

Table B13 – Frequency summary of experimental group

Pearson Chi-square: 3.19625, df=3, p=0.362351					
Pre/Post	**Local Clinic**	**Another Clinic**	**Private Dr**	**Other**	**Row**
Pre/Exp	40.44444	17.42222	49.15556	4.977778	112.0000
Post/Exp	24.55556	10.57778	29.84444	3.022222	68.0000
All Groups	65.00000	28.00000	79.00000	8.000000	180.0000

Table B14 – Summary of expected frequencies (experimental group)

Pearson Chi-square: 2.19256, df=3, p=0.533417					
Pre/Post	**Local Clinic**	**Another Clinic**	**Private Dr**	**Other**	**Row**
Pre/Exp	33.51825	8.37956	37.70803	2.394161	82.0000
Post/Exp	22.48175	5.62044	25.29197	1.605839	55.0000
All Groups	56.00000	14.00000	63.00000	4.000000	137.0000

Table B15 – Summary of expected frequencies (control group)

Pearson Chi-square: .102260, df=1, p=0.749135			
Pre/Post	**Yes**	**No**	**Row**
Pre-test	69.6715	13.32847	83.0000
Post-test	45.3285	8.67153	54.0000
All Groups	115.0000	22.00000	137.0000

Table B16 – Summary of expected frequencies (School A)

Pearson Chi-square: 2.25564, df=1, p=0.133132			
Pre/Post	**Yes**	**No**	**Row**
Pre-test	33.25000	1.750000	35.00000
Post-test	23.75000	1.250000	25.00000
All Groups	57.00000	3.000000	60.00000

Table B17 – Summary of expected frequencies (School B)

Pearson Chi-square: .160067, df=1, p=0.689096			
Pre/Post	**Yes**	**No**	**Row**
Pre-test	43.38462	3.615385	47.00000
Post-test	16.61538	1.384615	18.00000
All Groups	60.00000	5.000000	65.00000

Table B18 – Summary of expected frequencies (School C)

Pearson Chi-square: 2.27642, df=1, p=0.131358			
Pre/Post	**Yes**	**No**	**Row**
Pre-test	20.50000	7.50000	28.00000
Post-test	20.50000	7.50000	28.00000
All Groups	41.00000	15.00000	56.00000

Table B19 – Summary of expected frequencies (School D)

Feelings Change?	**Pre**	**Post**	**Row**
Yes	7 (17.07%)	7 (26.92%)	14
No	34 (82.93%)	19 (73.08%)	53
All Groups	41	26	67

Table B20 – Summary for School A (experimental group)

Pearson Chi-square: .933883, df=1, p=0.333858			
Feelings Change?	**Pre**	**Post**	**Row**
Yes	7 (17.07%)	7 (26.92%)	14
No	34 (82.93%)	19 (73.08%)	53
All Groups	41	26	67

Table B21 – Expected frequency for School A (experimental group)

Feelings Change?	**Pre**	**Post**	**Row**
Yes	14 (33.33%)	8 (30.77%)	22
No	28 (66.67%)	18 (69.23%)	46
All Groups	42	26	68

Table B22 – Summary for School A (Control group)

Pearson Chi-square: .048242, df=1, p=0.826152			
Feelings Change?	**Pre**	**Post**	**Row**
Yes	13.58824	8.41176	22.00000
No	28.41176	17.58824	46.00000
All Groups	42.00000	26.00000	68.00000

Table B23 – Expected frequency for School A (control group)

Feelings Change?	**Pre**	**Post**	**Row**
Yes	7 (33.33%)	7 (41.18%)	14
No	14 (66.67%)	10 (58.82%)	24
All Groups	21	17	38

Table B24 – Summary for School B (experimental group)

Pearson Chi-square: .248366, df=1, p=0.618229			
Feelings Change?	**Pre**	**Post**	**Row**
Yes	7.73684	6.26316	14.00000
No	13.26316	10.73684	24.00000
All Groups	21.00000	17.00000	38.00000

Table B25 - Expected frequency for School B (experimental group)

Feelings Change?	**Pre**	**Post**	**Row**
Yes	5 (38.46%)	2 (25.00%)	7
No	8 (61.54%)	6 (75.00%)	14
All Groups	13	8	21

Table B26 – Summary for School B (control group)

Pearson Chi-square: .248366, df=1, p=0.618229			
Feelings Change?	**Pre**	**Post**	**Row**
Yes	4.33333	2.666667	7.00000
No	8.66667	5.333333	14.00000
All Groups	13.00000	8.000000	21.00000

Table B27 - Expected frequency for School B (control group)

Feelings Change?	Pre	Post	Row
Yes	5 (13.89%)	4 (30.77%)	9
No	31 (86.11%)	9 (69.23%)	40
All Groups	36	13	49

Table B28 – Summary for School C (experimental group)

Pearson Chi-square: 1.81511, df=1, p=0.177900			
Feelings Change?	**Pre**	**Post**	**Row**
Yes	6.61224	2.38776	9.00000
No	29.38776	10.61224	40.00000
All Groups	36.00000	13.00000	49.00000

Table B29 - Expected frequency for School C (experimental group)

Feelings Change?	Pre	Post	Row
Yes	1 (9.09%)	0 (0.00%)	1
No	10 (90.91%)	5 (100.00%)	15
All Groups	11	5	16

Table B30 – Summary for School C (control group)

Pearson Chi-square: .484848, df=1, p=0.486236			
Feelings Change?	**Pre**	**Post**	**Row**
Yes	0.68750	0.312500	1.00000
No	10.31250	4.687500	15.00000
All Groups	11.00000	5.000000	16.00000

Table B31 - Expected frequency for School C (control group)

Feelings Change?	Pre	Post	Row
Yes	1 (7.69%)	0 (0.00%)	1
No	12 (92.31%)	11 (100.00%)	23
All Groups	13	11	24

Table B32 – Summary for School D (experimental group)

Pearson Chi-square: .882943, df=1, p=0.347399			
Feelings Change?	**Pre**	**Post**	**Row**
Yes	0.54167	0.45833	1.00000
No	12.45833	10.54167	23.00000
All Groups	13.00000	11.00000	24.00000

Table B33 - Expected frequency for School D (experimental group)

Feelings Change?	Pre	Post	Row
Yes	3 (20.00%)	3 (18.75%)	6
No	12 (0.00%)	13 (81.25%)	25
All Groups	15	16	31

Table B34 – Summary for School D (control group)

Pearson Chi-square: .007750, df=1, p=0.929850			
Feelings Change?	**Pre**	**Post**	**Row**
Yes	2.90323	3.09677	6.00000
No	12.09677	12.90323	25.00000
All Groups	15.00000	16.00000	31.00000

Table B35 - Expected frequency for School D (control group)

Knowledge	**School A**	**School B**	**School C**	**School D**	**Row**
0	1 (1.19%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1
1	1 (1.19%)	0 (0.00%)	4 (8.51%)	0 (0.00%)	5
2	9 (10.71%)	4 (11.43%)	14 (29.79%)	2 (7.14%)	29
3	37 (44.05%)	14 (40.00%)	18 (38.30%)	17 (60.71%)	86
4	36 (42.86%)	17 (48.57%)	11 (23.40%)	9 (32.14%)	73
All Groups	84	35	47	28	194

Table B36 – Summary of correct answers (pre-test)

Knowledge	**School A**	**School B**	**School C**	**School D**	**Row**
1	1 (1.85%)	0 (0.00%)	1 (5.56%)	1 (3.57%)	3
2	4 (7.41%)	5 (20.00%)	4 (22.22%)	2 (7.14%)	15
3	11 (20.37%)	7 (28.00%)	9 (50.00%)	10 (35.71%)	37
4	38 (70.37%)	13 (52.00%)	4 (22.22%)	15 (53.57%)	70
All Groups	54	25	18	28	125

Table B37 – Summary of correct answers (post-test)

	Pre-test				**Post-test**			
	Experimental Group (n=112)		Control Group (n=82)		Experimental Group (n=69)		Control Group (n=56)	
	Desired	Undesired	Desired	Undesired	Desired	Undesired	Desired	Undesired
A	39	3	40	2	21	5	20	7
B	20	1	13	0	17	0	7	1
C	26	9	7	4	11	2	4	1
D	11	2	11	3	8	4	14	2

Table B38 – Question 14 – Best to get a lot of sexual experience prior to marriage

	Pre-test				**Post-test**			
	Experimental Group (n=112)		Control Group (n=82)		Experimental Group (n=69)		Control Group (n=56)	
	Desired	Undesired	Desired	Undesired	Desired	Undesired	Desired	Undesired
A	41	1	39	3	23	3	25	2
B	19	1	14	0	16	0	8	0
C	32	3	9	1	12	1	5	0
D	12	1	14	1	1	1	12	4

Table B39 – Question 15 – To be fulfilled in a relationship one needs to be having sex

	Pre-test				Post-test			
	Experimental Group (n=112)		Control Group (n=82)		Experimental Group (n=69)		Control Group (n=56)	
	Desired	Undesired	Desired	Undesired	Desired	Undesired	Desired	Undesired
A	25	16	29	8	20	7	18	9
B	14	6	8	4	11	5	6	2
C	26	8	8	3	10	3	5	0
D	11	2	10	4	9	3	10	6

Table B40 – Question 18 – Decision to wait before having sex

Behaviour	School A	School B	School C	School D	Row
0	2 (2.38%)	1 (2.86%)	1 (2.13%)	0 (0.00%)	4
1	1 (1.19%)	2 (5.71%)	1 (2.13%)	0 (0.00%)	4
2	4 (4.76%)	3 (8.57%)	0 (0.00%)	1 (3.57%)	8
3	41 (48.81%)	12 (34.29%)	24 (51.06%)	17 (60.71%)	94
4	31 (36.90%)	11 (31.43%)	12 (25.53%)	7 (25.00%)	61
5	5 (5.95%)	6 (17.14%)	7 (14.89%)	3 10.71% ()	21
6	0 (.00%)	0 (0.00%)	2 (4.26%)	0 (0.00%)	2
All Groups	84	35	47	28	194

Table B41 – Summary of behaviours over schools (pre-test)

Behaviour	School A	School B	School C	School D	Row
0	0 (0.00%)	0 (0.00%)	1 (5.56%)	1 (3.57%)	2
1	0 (0.00%)	2 (8.00%)	1 (5.56%)	0 (0.00%)	3
2	1 (1.85%)	5 (20.00%)	1 (5.56%)	2 (7.14%)	9
3	37 (68.52%)	10 (40.00%)	11 (61.11%)	15 (53.57%)	73
4	11 (20.37%)	6 (24.00%)	2 (11.11%)	7 (25.00%)	26
5	5 (9.26%)	2 (8.00%)	1 (5.56%)	3 (10.71%)	11
6	0 (0.00%)	0 (0.00%)	1 (5.56%)	0 (0.00%)	1
All Groups	54	25	18	28	125

Table B42 – Summary of behaviours over schools (post-test)

Are you at risk?	Have had sex	Not had sex	Row
Yes	11 (61.11%)	35 (39.77%)	46
No	7 (38.89%)	53 (60.23%)	60
All Groups	18	88	106

Table B43 – Summary table for experimental group (pre-test)

Pearson Chi-square: 2.76997, df=1, p=0.096051			
Are you at risk?	**Have had sex**	**Not had sex**	**Row**
Yes	7.81132	38.18868	46.0000
No	10.18868	49.81132	60.0000
All Groups	18.00000	88.00000	106.0000

Table B44 – Expected Frequencies for experimental group (pre-test)

Are you at risk?	Have had sex	Not had sex	Row
Yes	1 (50.00%)	34 (47.22%)	35
No	1 (50.00%)	38 (52.78%)	39
All Groups	2	72	74

Table B45 – Summary table for control group (pre-test)

Pearson Chi-square: .006024, df=1, p=0.938137			
Are you at risk?	**Have had sex**	**Not had sex**	**Row**
Yes	0.945946	34.05405	35.00000
No	1.054054	37.94595	39.00000
All Groups	2.000000	72.00000	74.00000

Table B46 – Expected Frequencies for control group (pre-test)

Are you at risk?	Have had sex	Not had sex	Row
Yes	6 (30.00%)	19 (42.22%)	25
No	14 (70.00%)	26 (57.78%)	40
All Groups	20	45	65

Table B47 – Summary table for experimental group (post-test)

Pearson Chi-square: .873889, df=1, p=0.349883			
Are you at risk?	**Have had sex**	**Not had sex**	**Row**
Yes	7.69231	17.30769	25.00000
No	12.30769	27.69231	40.00000
All Groups	20.00000	45.00000	65.00000

Table B48 – Expected Frequencies for experimental group (post-test)

Are you at risk?	Have had sex	Not had sex	Row
Yes	9 (64.29%)	25 (59.52%)	34
No	5 (35.71%)	17 (40.48%)	22
All Groups	14	42	56

Table B49 – Summary table for control group (post-test)

Pearson Chi-square: .099822, df=1, p=0.752044			
Are you at risk?	**Have had sex**	**Not had sex**	**Row**
Yes	8.50000	25.50000	34.00000
No	5.50000	16.50000	22.00000
All Groups	14.00000	42.00000	56.00000

Table B50 – Expected Frequencies for control group (post-test)

HIV test?	Have had sex	Not had sex	Row
Yes	1 (5.56%)	10 (11.24%)	11
No	17 (94.44%)	79 (88.76%)	96
All Groups	18	89	107

Table B51 – Summary table for experimental group (pre-test)

Pearson Chi-square: .523769, df=1, p=0.469240			
HIV test?	**Have had sex**	**Not had sex**	**Row**
Yes	1.85047	9.14953	11.0000
No	16.14953	79.85047	96.0000
All Groups	18.00000	89.00000	107.0000

Table B52 – Expected Frequencies for experimental group (pre-test)

HIV test?	**Have had sex**	**Not had sex**	**Row**
Yes	2 (66.67%)	7 (9.33%)	9
No	1 (33.33%)	68 (90.67%)	69
All Groups	3	75	78

Table B53 – Summary table for control group (pre-test)

Pearson Chi-square: 9.28966, df=1, p=0.002305			
HIV test?	**Have had sex**	**Not had sex**	**Row**
Yes	0.346154	8.65385	9.00000
No	2.653846	66.34615	69.00000
All Groups	3.000000	75.00000	78.00000

Table B54 – Expected Frequencies for control group (pre-test)

HIV test?	**Have had sex**	**Not had sex**	**Row**
Yes	4 (19.05%)	2 (4.35%)	6
No	17 (80.95%)	44 (95.65%)	61
All Groups	21	46	67

Table B55 – Summary table for experimental group (post-test)

Pearson Chi-square: 3.82114, df=1, p=0.050612			
HIV test?	**Have had sex**	**Not had sex**	**Row**
Yes	1.88060	4.11940	6.00000
No	19.11940	41.88060	61.00000
All Groups	21.00000	46.00000	67.00000

Table B56 – Expected Frequencies for experimental group (post-test)

HIV test?	**Have had sex**	**Not had sex**	**Row**
Yes	5 (35.71%)	6 (14.63%)	11
No	9 (64.29%)	35 (85.37%)	44
All Groups	14	41	55

Table B57 – Summary table for control group (post-test)

Pearson Chi-square: 2.89852, df=1, p=0.088664			
HIV test?	**Have had sex**	**Not had sex**	**Row**
Yes	2.80000	8.20000	11.00000
No	11.20000	32.80000	44.00000
All Groups	14.00000	41.00000	55.00000

Table B58 – Expected Frequencies for control group (post-test)

Appendix C – Questionnaires

Questionnaire One - Afrikaans

OIL MAATSTAF STUDEER: TRACK 1

Dankie vir u deelname in hierdie evaluasie. Dit is nie 'n toets nie, dit wil se^ geen punte sal toegeken word nie. Alle antwoorde sal konfidensieel behandel word. Dit is noodsaaklik dat u hierdie vrae eerlik beantwoord.

SKOOL:	**MANLIK:**
	VROULIK:
DATUM:	**OUDERDOM:**

1 Hoe dink jy kan jy help om jou gemeenskap te verander in die volgende jaar?
……
……
……
……

2 Waar sal jy verkies om 'n MIV toets te ondergaan?
- ❑ 'n Kliniek in die gemeenskap
- ❑ 'n Kliniek in 'n ander gemeenskap
- ❑ 'n Private dokter
- ❑ 'n NGO
- ❑ Onderwyser
- ❑ Andere (wees spesifiek)…….....

3 Sal jy vir jemand vertel as jou toets positief is?
- ❑ Ja
- ❑ Nee

4 Infgeval jou antwoord ja was wie?(Jy kan meer as een persoon aanmerk)
- ❑ Sommige in jou familie
- ❑ Onderwyser
- ❑ Pastoor
- ❑ Vriend
- ❑ meisie/ kerel
- ❑ Andere (wees spesifiek)…….....

5 As 'n vriend vir jou se^ hy/sy is MIV positief, sal jou gevoelens omtrent hom/haar verander?
- ❑ Ja
- ❑ Nee

6 Hoe dink jy sal jy voel? (Jy kan meer as een gevoel aanmerk)

- ❑ Bang om ook aangesteek te word wanneer jy na aan hom/haar is
- ❑ Hartseer omdat jou vriend siek is
- ❑ Kwaad vir jou vriend omdat hy/sy seksuel ontverantwoordelik opgetree het
- ❑ Geen verandering nie hy/sy is jou vriend en jy sal hom/haar bystaan
- ❑ Andere (wees pesifiek)…….....

7 As jou vriend verslaaf is aan alkahol of dwelms, sal jy: (jy kan meer as een antwoord aanmerk)

- ❑ 'n Onderwyser of ouer se^
- ❑ Probeer om hom/haar te help maniere te om die probleem te hanteer
- ❑ Niks doen nie; dit is nie jou besigheid nie
- ❑ Jou vriend aanmoedig om 'n raadgewer te benader

8 As jy sterk oor iets voel sal jy maklik van mening verander?

- ❑ Ja
- ❑ Nee

9 Dink jy media die verander jou opinies en houdings in 'n positiewe manier?

- ❑ Ja
- ❑ Nee

10 Wie of wat sal jou mening verander? (jy kan meer as een antwoord aanmerk)

- ❑ Media
- ❑ Ouers
- ❑ Godsdiens
- ❑ Vriende
- ❑ Andere (wees spesifiek)…….....

Die volgende vrae is baie persoonlik. Jou gewilligheid dit eerlik aan te merk is belangrik en OIL waardeer jou help. Die gebruik van korrekte data is noodsaaklik as OIL effektiewe tiener programme wil aanbied.

Beantwoord die volgende stellings met 'n merkie in die waarheid/vals kolom of in die ja/nee kolom

		JA	NEE
1	Baie mense wat seksuele oordraagbare infeksies (SOI) het weet nie hulle het dit nie		
2	Alle SOI's is geneesbaar		
3	Dit is belangrik om 'n adviseerder te sien voor 'n MIV toets		
4	As 'n man seksuele omgang met 'n maagd het sal hy genees wees van MIV		
5	As twee MIV positiewe mense seksuele omgang het hoef hulle nie 'n kondoom te gebruik nie		
6	Meestal ouer mense kry VIGS		
7	Kondome voorkom altyd dat MIV van een persoon na die ander versprei word		
8	Dink jy is in gevaar/blootgestel om MIV/VIGS op te doen?		
9	Was jy al vir 'n MIV toets?		
10	Weet jy wat 'n seksuele oordragbare infeksie is (SOI)?		
11	Was jy al voorheen vir 'n SOI getoets al?		
12	Het jy 'n SOI gehad al?		
13	Het jy ooit voorheen dwelms gebruik?		
14	Dit is die beste om baie seksuele ondervinding te ervaar voor jy trou		
15	Om vervul te wees in 'n verhouding moet jy seksuele omgang het		
		JA	NEE
16	Het jy 'n meisie/ke^rel?		
17	Het jy gereeld seksuele omgang?		
18	Het jy besluit om op 'n later stadium seks te he^?		
19	Het jy meer as een seksuele deelgenoot op die oomblik?		
20	Het jy met meer as een persoon seksuele omgang ondergaan?		
21	Het jy al ooit seksuele omgang gehad as gevolg van te veel alkahol inname?		
22	Het jy al 'n kondoom gebruik?		
23	Gebruik jy altyd 'n kondoom wanneer jy seksuele omgang het?		
24	Gebruik jy enige kontrisepsie?		
25	Indien ja, wat?		
26	Het jy al 'n swangerskap toets ondergaan?		
27	Was jy al swanger of het jy al iemand swanger gemaak al?		
28	Het jy 'n kind?		
29	Het jy al 'n aborsie ondergaan?		
30	Was jy al betrokke by enige ander seksuele aktiwiteit byvoorbeeld " Thigh sex"," heavy petting"		

Baie Dankie

Questionnaire 2 – English

OIL BASELINE STUDY: TRACK 1

Thank you for participating in this study. This is not a test for marks and what you say in here will be kept confidential. It is important that you are completely honest in your responses.

SCHOOL:	**BOY:**
	GIRL:
DATE:	**AGE:**

Please answer the question below and tick in the appropriate boxes

1 How do you think you could help your community to change next year?

.....
.....
.....
.....

2 Where would you choose to go for a VCT (HIV testing)?

- ❑ A clinic in your community
- ❑ A clinic in another community
- ❑ A private doctor
- ❑ A NGO
- ❑ Teacher
- ❑ Other (Pease specify).....

3 Would you tell anyone if the test result was positive?

- ❑ Yes
- ❑ No

4 If yes, who? (You may tick more than one)

- ❑ Some in your family
- ❑ Teacher
- ❑ Pastor
- ❑ Friend
- ❑ Boyfriend/Girlfriend
- ❑ Other (please specify).....

5 If a friend told you they were HIV positive, do you think your feelings for them would change?

- ❑ Yes
- ❑ No

6 How do think you would feel? (You may tick more than one)

- ❑ Scared that you may also become infected by being close to him/her
- ❑ Sad that your friend is sick
- ❑ Angry at your friend for behaving sexually irresponsibly
- ❑ No different, he/she is your friend and you will support him/her
- ❑ Other (please specify)…….....

7 If your friend had a drug or alcohol addiction would you: (you may tick more than one)

- ❑ Tell a teacher, or parent
- ❑ Try to help him/her find ways of dealing with the problem
- ❑ Do nothing; it is none of your business
- ❑ Encourage your friend to go for counselling

8 If you feel strongly about something, do you easily change your views?

- ❑ Yes
- ❑ No

9 Do you think that the media shapes your opinions and attitudes in a positive way?

- ❑ Yes
- ❑ No

10 What would make you change your views? (You may tick more than one)

- ❑ Media
- ❑ Parents
- ❑ Religious beliefs
- ❑ Friends
- ❑ Other (please specify)…….....

The following questions are very personal. Your willingness to answer them truthfully is important and OIL appreciates your help. The use of correct data is essential if OIL is to provide effective teen programmes.

Please answer the following statements by ticking the true or false box or the yes or no box

		YES	NO
1	Many people who have a Sexually Transmissible Infection (STI) don't know they have one		
2	All STI's can be cured		
3	It is important to have counselling before having an HIV test		
4	If an infected man has sex with a virgin it will cure him of HIV		
5	If two people who are HIV positive have sex together, they don't have to use a condom		
6	Mostly older people get AIDS		
7	Condoms always stop HIV from passing from one person to another		
8	Do you think you are at risk of contracting HIV/AIDS?		
9	Have you been for an HIV test before?		
10	Do you know what an STI (Sexually Transmissible Infection) is?		
11	Have you been tested for STI's before?		
12	Have you had an STI before?		
13	Have you ever taken drugs?		
14	It is best to get a lot of sexual experience before getting married		
15	To be fulfilled in a relationship you must be having sex		
		YES	**NO**
16	Do you have a boyfriend/girlfriend?		
17	Have you had sex before?		
18	Have you decided to wait to have sex until a later stage?		
19	Do you have more than 1 sexual partner at the moment?		
20	Have you had sex with more than one person?		
21	Have you ever had sex because you had too much alcohol?		
22	Have you used a condom before?		
23	If you have had sex, have you used a condom every time you have had sex?		
24	Are you taking any other form of birth control?		
25	If yes, what?		
26	Have you had a pregnancy test before?		
27	Have you been pregnant, or made a girl pregnant?		
28	Do you have a child?		
29	Have you ever had an abortion?		
30	Have you been involved in any other kind of sexual activity? e.g. Thigh sex, heavy petting		

Thank You

Questionnaire 3 – Xhosa

Uvavanyo lakwa OIL: TRACK 1

Siyabulela ngokuthabatha inxaxheba yakho koluvavanyo. Oluvavanyo aluloviwe kwaye okubhalwe apha kuyimfihlo. Kubalulekile ukuba uphendule imibuzo ngokunyanisekileyo.

ISIKOLO:	**NTOMBI:**
	MFANA:
USUKU:	**IMINYAKA:**

Nceda khetha ibhokisi ehambelana nempendulo yakho

1 Ucinga ukuba unganceda njani ukuphucula ingingqi yakho kulonyaka uzayo?

.....

.....

.....

.....

2 Ukhetha ukulenzela phi uvavanyo lwesifo sikagawulayo?

- ❑ Kwi kliniki esengingqini yakho
- ❑ Kwi kliniki ekwenye ingingqi
- ❑ Kuqhirha ozimeleyo
- ❑ Kumbutho ojongene nemfuno zabahlali
- ❑ Utitshala
- ❑ Ezinye indawo (nceda nika inkcazelo).....

3 Ungamxelela omnye umntu ukuba ufumaniseka unesifo sikagawulayo?

- ❑ Ewe
- ❑ Hayi

4 Ukuba ewe, ngubani? (Khetha abantu ongabaxelela)

- ❑ Abanye bosapho lwakho
- ❑ Utitshala
- ❑ Umfundisi-wecawa
- ❑ Umhlobo
- ❑ Iqabane/iqabanekazi
- ❑ Omnye (Nnceda nika incazelo)

5 Ukuba omnye wabahlobo bakho uthe wafumaniseka intsholongwane sikagawulayo, ingaba uvakalelo yakho ingatshintsha?

- ❑ Ewe
- ❑ Hayi

6 Ucinga ukuba ungaziva njani? (Khetha kangangoko ufuna)

- ❑ Ungoyika ukusuleleka xa usondelelene nomlingane wakhe
- ❑ Ungakhathazeka ngo kugula komhlobo wakho
- ❑ Unganomsindo xa ufumanisa ukuba umhlobo wakhe isondo usenza into yokudlala
- ❑ Akuzubakho mahluko, uzakumnika inkxaso nje ngomhlobo
- ❑ Enye (nceda nika inkcazelo).....

7 Ukuba umhlobo wakho ulixhoba leziyobisi notywala unga: (khetha iimpendulo zakho)

- ❑ Xelela utitshala, okanye umzali
- ❑ Ungazama ukumnceda a fumane indlela yokoyisa legnxaki
- ❑ Awunokwenza nto, ayifuni wena
- ❑ Ungamkhuthaza ukuba kwabanamava

8 Ukuba uziva uqinisekile ngento, ingaba kulula ukutshintsha amava akho?

- ❑ Ewe
- ❑ Hayi

9 Ucinga ukuba onondaba(TV, radio,magazines, etc) indlela ocinga ngayo bayithetha ngendlela efanelekileyo?

- ❑ Ewe
- ❑ Hayi

10 Yintoni engenza ukuba utshintshe indlela ocinga ngayo?

- ❑ Onondaba
- ❑ Abazali
- ❑ Inkolelo
- ❑ Abahlobo
- ❑ Enye (nceda nika inkcazelo).....

Nceda uphendule lemibuzo ngokukhetha ibokisi ka ewe okanye hayi, yinyani okanye ayiyonyani

		Yinyani	**Ayiyonyani**
1	Abantu abanintsi abanezifo zesondo abazazi ukuba banazo		
2	Zonke izifo zesondo ziyanyangeka		
3	Kubalulekile ukuba uthethe neecounsellors phambi kokuba utsalwe igazi xa uxilongelwa ugawulayo		
4	Ukuba umntu onesifo sikagawulayo angabelana ngesondo nomntu ongazange alalane namntu ngaphambili angaphila qethe		
5	Ukuba abantu ababini abanesifo sikagawulayo bangalalana kunye akufunekanga bakusebenzise isithintelo sokufumana isifo		
6	Ikakhulu ngabantu abadala abafumana isifo sikagawulayo		
7	Isithintelo soloko sivala isifo sikagawulayo singagqitheli komnye umntu		
8	Ingaba ucinga ukuba usebungciphekweni yokufumana isifo sikagawulayo?		
9	Ubukhe wayokuxilongelwa isifo sikagawulayo ngaphambili?		
10	Uyasazi ukuba isifo sokulalana ngesondo yintoni?		
		Ewe	**Hayi**
11	Ubukhe wayokuxilongelwa isifo sokulalana ngesondo ngaphambili?		
12	Wawukhe wanaso isifo sokulalana ngesondo ngaphambili?		
13	Wawukhe wazisebenzisa iziyobisi ngaphambili?		
14	Phambi kokuba utshate kufuneka ukuba ulalane ngesondo kangangoko ufuna		
15	Ukuze wonwabe nomntu othandana bonwabe kkufuneka babelane ngesondo		
16	Ingaba unaye umntu othandana naye?		
17	Wawukhe wabelana ngesondo ngaphambili?		
18	Ingaba ugqibe ukuba uzakulinda ideibelixesha elilungile phambi kokuba ulalane ngesondo?		
19	Ingaba umntu ulalana naye mnye okwangoku?		
20	Ingaba ulele nomntu omnye okanye ngaphezulu?		
21	Ingaba wawukhe wabelana ngesondo usele utywala?		
22	Wawukhe wasebenzisa isithinteli zifo ngaphambili?		
23	Ingaba isithinteli sezifo usisebenzisa ngamaxesha onke xa ulalana ngesondo?		
24	Ingaba sikhona isithinteli sokukhulelwa osisebenzisayo?		

		Yinyani	Ayiyonyani
25	IUkuba ewe sesiphi?		
26	Wawukhe walwenza uxilongo lokukkhulelwa ngaphambili?		
27	Wawukhe wakhulelwa okanye wenza intombazana ikhulelwe ngaphambili?		
28	Unaye emntwana?		
29	Wawukhe waqhomfa ngaphambili?		
30	Wawukhe walalana ngesondo ngezinye iindlela? Umzekelo, ukulalana emathangeni?		

Enkosi